

The Economist

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Those AI market jitters

MBS v MBZ: spreading destruction

Republicans have a Texas-size problem

How runners can avoid injuries

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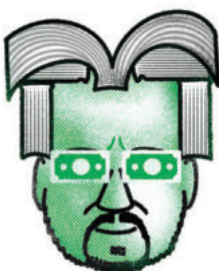
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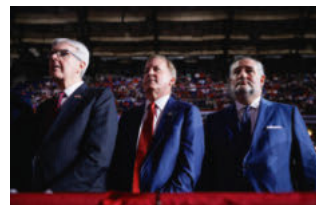


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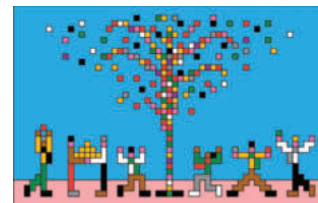
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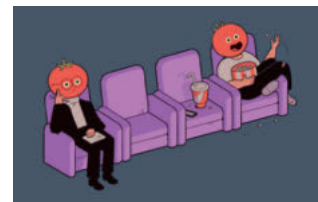
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to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

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The world this week Politics



Curfews were imposed in Paris, Lyon and other cities following the worst rioting and looting in **France** in years. More than 2,000 people were arrested as masked *casseurs*, or hooligans, targeted shops, businesses and political premises. The roof of the town hall in Limoges, which withstood two world wars, collapsed after it was set on fire. The government admitted the police had lost control of the protests. The French president addressed the nation and said “nothing justifies” the violence. Marine Le Pen, the right-wing front-runner in next year’s presidential election, warned of a threat to democracy and blamed Mr Macron and the left. Jean-Luc Mélenchon, the left-wing’s candidate, denied he was stirring up trouble by urging support for the protests.

Broken-windows shopping

Widespread looting accompanied similar protests in **Italy**. The government announced new security steps that allow the police to detain under-18s for 12 hours, among other measures. To prevent further unrest hundreds of soldiers were deployed to Milan, which has borne the brunt of the trouble and saw luxury-goods shops ransacked.

In **Albania** student-led protests over corruption, poor education and a lack of jobs spread from Tirana to other cities and towns. Riot police used tear-gas and rubber bullets against the demonstrators when they reached the Ministry of Education. Edi Rama said he would not resign as prime minister, and warned that the protesters were

endangering Albania’s path to membership of the EU.

Volodymyr Zelensky flew to Oslo for a meeting with Steve Witkoff, Donald Trump’s envoy, amid a deterioration in relations between **Ukraine** and the **White House**. Earlier, Mr Trump took another step towards favouring **Russia** by waiving sanctions mandated by the Graham Act, which he signed into law last month. Mr Zelensky criticised Mr Trump’s waiver, arguing that the act was “supposed to impose truly effective pressure on Russia”. The Americans described the meeting in Oslo as constructive. Mr Witkoff then flew to St Petersburg for talks with Vladimir Putin. The Kremlin said Mr Putin had agreed to restart three-way peace talks.

Britain said it would deploy fighter jets and a transport aircraft to **Saudi Arabia** to help defend the kingdom against attacks by the Houthis, Yemeni rebels backed by Iran. The jets will help protect infrastructure and residential areas, but will not conduct offensive strikes against the rebels. In **Yemen** the Houthis fired missiles at a training camp for government forces, killing at least 73 people. The Yemeni government is allied with the Saudis.

Egypt’s president, Abdel-Fattah al-Sisi, also pledged to help the Saudis, and asked parliament to approve the deployment of combat forces. The extent of any Egyptian involvement in the conflict is unclear. **Turkey’s** parliament was also considering a plan to send military personnel to Saudi Arabia.

More than 80 people were killed in a drone strike near a market in southern **Sudan**, most of them commuters on their way home from work. The Rapid Support Forces, which controls the area, blamed the strike on the army, which it is fighting in a civil war. Another drone hit a town in a disputed region near the border with

South Sudan, killing at least 150 people. Such attacks causing mass civilian casualties have become increasingly common in the three-year conflict.

A former **Rwandan** soldier and vocal critic of Paul Kagame, Rwanda’s president, was found beheaded near Kampala, the capital of neighbouring Uganda. Robert Kabera, who fled to Uganda in 2020, had recently posted on social media that he feared for his life. He is not the first exiled Rwandan dissident to turn up dead in gruesome circumstances.

Nigeria confirmed its first case of **Ebola** since the Democratic Republic of Congo announced an outbreak of the disease in May. Authorities said the patient had travelled to Nigeria from Uganda. The Ugandan government said there were currently no active cases of the disease in the country.

America’s State Department reported that 300,000 **visas** have now been revoked during Donald Trump’s second term, up from the 175,000 that had been tallied up to early August. Announcing the new numbers an official reiterated the administration’s policy: “zero tolerance for foreigners here on visas who break the law”.

A non-binding referendum in **Alberta** saw more than 75% of voters back an option to remain a province of **Canada**, rather than start the process of holding a binding referendum on splitting away. Mark Carney hailed the outcome as a victory for “unity”. “Canada is so much greater than the sum of its parts,” he said. However, Albertans did back other measures in the referendum to give the province more control over immigration.

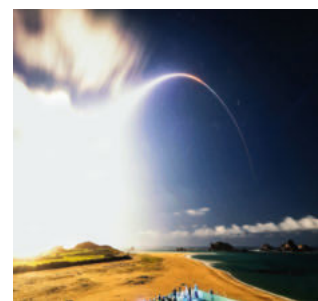
Luiz Inácio Lula da Silva and Flávio Bolsonaro debated each other ahead of **Brazil’s** presidential election run-off on October 25th. Polls show the race has narrowed since the first round on October 4th,

when Mr Bolsonaro took 47% of the vote to Lula’s 45%.

Marco Rubio, **America’s** secretary of state, met Subrahmanyam Jaishankar, **India’s** foreign minister, in Mumbai for talks on finalising a trade deal. The pact has been held up for months because of tensions over American tariffs and India’s purchase of Russian oil. But Mr Rubio now says an agreement is “very, very close”.

Unhappy anniversary

More than 9,500 police officers were deployed in Jakarta to deter student-led protests that were called to mark the second anniversary of Prabowo Subianto’s inauguration as **Indonesia’s** president. The deterrence worked, as few students gathered to demand Mr Prabowo do more to tackle the cost of living and other grievances. The president’s approval rating has plunged since taking office. MSCI, a global index service, warned that it might remove Indonesia’s emerging-market status because of its “market dysfunction”. Downgrading Indonesia would force many tracking funds to sell their Indonesian assets.



Japan’s space agency launched a spacecraft on a five-year mission to collect samples from Phobos, one of two small moons that orbit **Mars**, the first-ever return journey from the planet’s system. The spacecraft will enter Martian space in August 2027, landing on Phobos at some point in the following years. A rover will use a robotic arm to collect moon-dust. If all goes well, the spacecraft will depart in 2030 and return to Earth in 2031.

The world this week Business

Elon Musk floated the possibility of merging **SpaceX** and **Tesla**. There is a "lot of merit" in combining the companies, he said, and the boards of both have created independent committees to explore their options (as the boss and largest shareholder in both firms Mr Musk is not on the committees). A merger would bring together Mr Musk's AI ambitions for data centres, driverless cars and robots. SpaceX, meanwhile, reported quarterly revenue of \$14.6bn, up by 161% year on year, \$7.6bn of which came from AI (which it calls SI, or super intelligence). Mr Musk has pledged to give every child in America one SpaceX share, currently worth nearly \$160, next year.

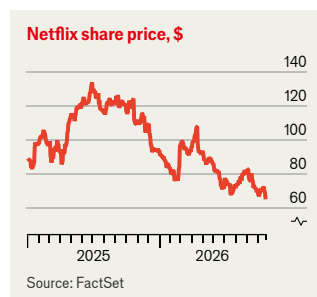
That's not in the driving test

Tesla earlier demonstrated its new **Roadster** sports car; the demonstration vehicle was modified with SpaceX-derived thrusters and able to flip mid-air and land safely again. The electric-carmaker reported a surprise positive cashflow in its latest earnings.

Market jitters resurfaced about the huge investments being made in AI. CoreWeave, which rents out data-centre capacity, saw its bonds and share price plunge amid worries that it will not be able to service its debt. The sell-off spread to other "neocloud" companies. Meanwhile, the share price of Elice, an AI-infrastructure company, fell by 32% on its first day of trading in South Korea.

Anthropic registered a net loss of more than \$80bn in the first half of this year, according to press reports, mostly because of an accounting charge related to bonds that could be eventually converted to shares. The frontier-AI firm is expected to make its stock-market debut in mid-November. Anthropic is to hand over 5% of its shares to a new public-benefit fund it has created to work in AI safety and examine AI's impact on the jobs market, among other things.

Meta's third-quarter revenue grew by 26%, year on year, to \$64.6bn. The company rolled out its Muse personal AI agent in September. Meanwhile, a court in New Mexico ordered Meta to pay \$25bn to the state after it was found to have misled users about privacy.



Stock in **Netflix** slid again after the streaming giant reported its slowest sales growth in three years. Revenue grew by 11.8% in the third quarter, year on year, to \$12.9bn. It expects even lower growth of 11.5% in the fourth quarter. Media reports of the company's woes as it struggles with slowing subscriptions read like a Hollywood movie plot, with both the head of film and the head of content summarily dismissed from their positions and the announcement of 1,000 job cuts. Despite massively

increasing its spending on content, Netflix is no longer producing a string of hits.

GDP expanded in **China** by 4.5% during the third quarter, year on year, an improvement on the 4.3% recorded in the second quarter. China's exports boom is offsetting weak domestic demand.

Liberté, égalité, insolvabilité

The riots in France helped push the yield on **French ten-year government bonds** above 5% for the first time since 2002, as investors bet that budgetary reforms would be delayed. Carrefour, a big supermarket chain, cut its annual profit forecast and blamed the violence, which it thinks will deter shoppers. Insurance losses from the weekend's unrest are expected to reach €1bn (\$1.1bn), exceeding the €700m in losses incurred over a week of rioting in 2023.

The developers of the **PHP** programming language issued a fix that they urged users to download immediately, after an OpenAI-led consortium discovered two critical vulnerabilities. PHP shores up a large part of the internet, running in the background of

websites, hosting platforms and control panels. Some governments, including in Finland and the Netherlands, took some websites offline while they worked on the issue. America's National Security Agency recommended that systems be taken offline if users couldn't apply the mitigations. The fix will have alerted criminals to the vulnerability of servers.

Britain's annual inflation rate jumped to 3.5% in September. Markets are now all but certain that the Bank of England will raise interest rates at its meeting in November.

UniCredit, Italy's second-largest bank, won approval from the European Central Bank to take over **Commerzbank**, a big German lender. Having secured 48% of Commerzbank's shares, UniCredit thinks it will take control of the bank by the end of the year.

The IPO of **Jio Platforms**, Mukesh Ambani's telecoms firm, was fully subscribed just two hours after it opened. The flotation is expected to raise \$3.2bn, making it India's biggest-ever listing. The shares start trading on October 28th.



The agony of liberal Europe

Centrist governments have fallen dangerously short—and are now paying the price

“THE FIRST steps into the Unrest seem straightforward enough—anger at the fall of real wages, at capitalist aggression, at the unwillingness of Parliament; anger fomented by agitators...reason wars with instinct.” Few of those who mobbed French cities this week would recognise those words. But many would agree with George Dangerfield, the British-American journalist who wrote them. The demonstrators were consumed by rage. Rage at the failure of the state and against the floundering centrist politicians who govern. Rage at high prices and economic dysfunction. And for some, rage against the idea of centrist politics at all.

Dangerfield wrote about “the strange death of liberal England” in the years before the first world war. Some predict a similarly grim fate for liberal Europe today. Arson, mob violence, looting and mass protests show how much citizens despair of their leaders. France has a long tradition of the *manif*, but the violence unleashed by hooded and masked rioters across the country over the past weekend was unusually severe (see Europe section). Protests also flared in Belgium, Italy and Portugal. In looming elections, first in Spain next month, then in France and Poland next year, voters are poised to punish moderate parties—and in Italy the far right is outflanking the populist Giorgia Meloni, who has governed from the centre. In the wings wait more charismatic figures from the extremes, including Marine Le Pen in France and Alice Weidel in Germany.

Many in America and in Europe say the centre has only itself to blame. Donald Trump crowds that Europe is on fire because its leaders spurned his advice, left their borders open and let millions of immigrants rush in each year, from Afghanistan, Algeria and Syria. Those on the MAGA right, such as Elon Musk, say growing Muslim populations pose the greatest threat. Some talk, apocalyptically and absurdly, of “civilisational erasure” or civil war. Even in Germany the chancellor, Friedrich Merz, said this week that high rates of migration and a failure to integrate the foreign-born are partly behind the sudden, violent upheaval. So has Hungary’s newish prime minister, Peter Magyar.

Their analysis is either craven or self-serving. Undoubtedly, many European voters also wish to curb immigration and asylum. But when it comes to the violent protests, the diagnosis is plain wrong. Instead the problems facing Europe’s centrists are more complex—and less easy to fix.

Even if some young protesters in France wear Algerian football shirts or chant pro-Palestinian slogans, the upheaval in Europe today is not about race or religion. Over 500,000 people marched in France on Saturday and they were largely unmasked and white. They were fired up, as in other countries, by the cost of living and poor public services. They want more fuel subsidies, more spending on schools, more handouts. Perhaps the largest group are aligned with the populist-left Jean-Luc Mélenchon, an ageing rabble-rouser and one-time Trotskyist, more akin to Bernie Sanders than an emir of ISIS.

Real violence did follow. But blame that on other factors,

none to do with race. Mobs struck at public buildings, police cars and more. They also smashed and grabbed from luxury retailers, like Louis Vuitton, and small stores run by immigrants. The police failed to keep order, having earlier been accused of brutality against student protesters. And much of the violence was incited and orchestrated by anarchists, who have a revolutionary political agenda. Typical among them is a man arrested after the burning of a 19th-century town hall in Limoges, a white French citizen in his mid-30s.

Although the critics are wrong, Europe’s centrists do face real problems—and France shows how serious they are. The first is the fiscal bind that makes effective political action so hard. When Emmanuel Macron, the president, faced huge protests by the *gilets jaunes* in 2018-19, he could deploy billions of euros to placate them. Today, that is no longer possible. France is spending too much and growing too slowly—by just over 1% a year under Mr Macron.

This autumn, lawmakers will struggle to pass a budget that cuts the deficit by a feeble 0.4 percentage points, to an unsustainable 5% of GDP. And still the government may fall. France is so overborrowed, and markets have so little faith in its politicians, that spreads of French government bonds over German ones have soared to levels last seen during the euro crisis.

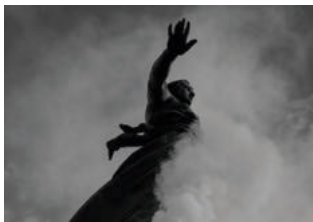
Instead of rising to this challenge, the centrists seem out of ideas. *The Economist* once cheered Mr Macron as a bold new standard-bearer for radical centrism. Today, while centrists huddle together for protection, all the energy is at the extremes. Surveys say over 80% of the French are pessimistic about their future, especially about their economy. Mr Merz is deeply unpopular and may be forced

from office. His anti-migrant sniping reflects his inability to find the words and ideas to see off Ms Weidel and her party, the Alternative for Germany.

No wonder the centrists face an electoral walloping. Polls show that Pedro Sánchez, the centre-left prime minister in Spain, will probably be turfed out soon to be replaced by a coalition of the centre- and populist right. In France the riots—and the myth that immigrants were to blame—may lift Ms Le Pen of the populist-right National Rally into the presidency in May. Polls show that the violence boosted her this week. While Mr Macron jetted off on a trip to the Gulf, Ms Le Pen gave a presidential-sounding speech calling for public order.

Chronicle of a death foretold

The violence in France should jolt head-in-the-sand centrists to confront the consequences of failure. If their countries descend into strife, they will lose power. If they lose power, the European Union will choke, as the rest of the world races ahead. If bond markets seize up, financial contagion could spread. If EU countries indulge Vladimir Putin of Russia, he will only become more aggressive. Dangerfield was writing about a time when most people were ignorant of the catastrophe that lay ahead. Today’s liberals have no such excuse. ■



Saudi Arabia and the United Arab Emirates

The rivalry wrecking a region

Gulf powers should stop fuelling carnage in their backyard

SAUDI ARABIA and the United Arab Emirates (UAE) could once pose as oases of stability. Now the two Gulf powers are under siege. A hostile Iran has a chokehold over the Strait of Hormuz, through which much of their commerce flows. The Houthis, an Iran-backed militia in Yemen, are lobbing missiles at Saudi airports and pipelines, disrupting trade and travel, and threatening Bab al-Mandab, another vital waterway. America, once the Gulf states' most reliable ally, is now less willing to guarantee their security, leaving both countries exposed.

Given the scale of the crisis, you might think the Saudis and Emiratis would be marshalling their resources to deal with the problems close to home. Instead, they are tussling for influence farther afield, and recklessly inflaming some of the worst wars in the world (see Briefing).

The conflicts on either side of the Red Sea have complex causes. The Emiratis and Saudis did not start them, and are not the only foreign powers meddling, but they are making them bloodier and harder to end. This is clearest in Sudan, where a mass-raping genocidal militia, the Rapid Support Forces (RSF), is fighting the Sudanese army for control of the country. So vile are the RSF that they hunt down and kill doctors, since any doctor can testify to their crimes (see 1843). Yet the Emiratis arm and support the RSF. (They deny it.) The Saudis back the somewhat less brutal regular army.

In Yemen, where both the Saudis and Emiratis have battled the Houthis, their squabbles have led to an Emirati pullback and allowed the Houthis, a regional menace, to fill the vacuum. The two Gulf states also vie for influence over ports on the Red Sea. Their competing alliances risk further aggravating tensions between Ethiopia and Eritrea, which are already close to (another) disastrous war.

Little of this makes sense. Granted, the ports of the Horn of Africa could be vital to regional trade, particularly as other

routes are under threat. And as America becomes less dependable under President Donald Trump, it is reasonable for both Saudi Arabia and the UAE to develop networks of allies to bolster their own security. But not like this. The two Gulf states' projections of power seem to owe more to the petulant rivalry between their respective rulers, Muhammad bin Salman and Muhammad bin Zayed, than to any thoughtful strategy (see Middle East & Africa section). By arming combatants, failing to curb the laundering of war loot and making conflicts more complex, they are likely to prolong them.

The human cost is vast. The wars in Sudan and Yemen have claimed hundreds of thousands of lives, driven nearly 20m people from their homes and pushed millions to the brink of famine. That alone should be ample spur for the Gulf meddlers to change course.

Failing that, they should recognise that their foreign adventurism threatens their own interests. Chaos on either side of the Red Sea imperils trade routes even as the war with Iran buffets the Gulf economies. Also, it is hard to see how hastening the collapse of the gigantic African state in their backyard makes either

Gulf power more secure. The barren UAE's dream of using Sudan as a breadbasket is unlikely to be realised while gunmen are slaughtering Sudanese farmers.

So the Saudis and Emiratis should stop supporting the warring parties in Sudan, especially the RSF, and work together towards a ceasefire. In Yemen they should set aside their rivalry, collaborate to contain the Houthis and try to restore a ceasefire there, too.

More responsible, less incendiary foreign policies from Abu Dhabi and Riyadh would not suddenly make the region calm. But they might make its wars a bit easier to tamp down. And that would ultimately benefit nearly everyone, including the Saudis and Emiratis themselves. ■



Risky debt

Pick your phantom

Either AI debt or government debt could crash markets. But probably not both

TWO SPECTRES stalk financial markets. One is the fear that surging bond yields will make the rich world's shaky public finances unsustainable, triggering a nasty fiscal crisis. The other is the worry that the revenues from artificial intelligence needed to keep the data-centre boom going will fail to arrive. As we report (see Business section), that would devastate credit markets and cause a big fall in stocks, too.

The good news is that only an Ichabod Crane would think that both these scenarios could strike at once. Instead, investors must decide which story is scarier. For now, *The Economist* is more worried about sovereign debt.

For most of the year, concerns about governments have dominated. Between the end of February and the start of October, the yield on 30-year US Treasuries rose by a full percentage point. The Iran war has sent inflation up and forced central banks to raise interest rates. Strong economic growth and the rush to build data centres have caused a scramble for capital in which governments have had to compete with the private sector. In Japan, Britain and especially France, investors have fretted about the ability of governments to service their debts.

In recent weeks, though, the prospect of an end to the AI boom has scared the markets more. The five-year bonds of ►►

► CoreWeave, a “neocloud” that rents out data centres, trade at a 15% yield, up from 10% in July. The company’s share price has fallen by about a third in the past month. The slowing revenue growth of Anthropic, an AI-model provider, has investors worried that the cash CoreWeave and its peers need may not arrive, or at least not quickly enough to pay their creditors. Interlinked financing means that pain could spread quickly, through both the AI supply chain and the private-credit and insurance firms that hold a lot of data-centre debt.

As a result, many sovereign bonds have rallied. There has been little relief for France, where riots are worsening a political crisis (see Leader), or Britain, where an upcoming budget makes investors nervous (see Britain section). But yields on ten-year Treasuries are down by a fifth of a point. Investors usually flee to the safety of American bonds in a downturn. Everywhere else, as data-centre investment slowed, an AI crash would ease the scramble for capital. And it would lead central banks to lower interest rates to support growth, thereby making debts easier to service.

Only in a big crash akin to the global financial crisis (GFC) of 2007-09 would the two risks collide. Governments are already sufficiently in the red that a deep recession would, by collapsing tax revenues and increasing welfare spending, make budget deficits look truly terrifying. Long-term bond yields might rise even as short-term interest rates fell—a nasty symptom of fiscal malaise that sometimes strikes emerging markets. It did not happen during the GFC, but the starting-point for debt and deficits today is higher.

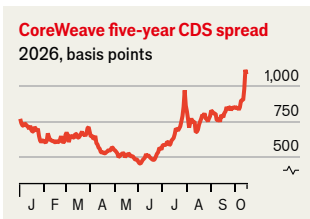
Thankfully, there is no reason to expect such a deep crash. True, the history of finance shows that useful new technologies often bring about a boom and bust, and the web of fi-

nancing behind AI has become complex. But the industry’s interlinkages are better understood than the alphabet-soup of housing-market securities was in 2007. Banks are safer, too. Though they are exposed to AI via their lending to private-credit firms, their balance-sheets are less fragile and better monitored. And backstopping much of the industry is the chipmaker Nvidia, which has an enormous cash pile. Most important, AI assets, though a big slice of many stock indices, are a smaller chunk of household wealth than housing.

So the best comparison for today’s AI vulnerabilities remains the dotcom bubble of the late 1990s. When it burst in 2000, cratering stocks caused only a mild recession. Bond

yields came down, too, and underlying productivity growth held up. Such a scenario would hardly solve governments’ long-term budget problems, but it might forestall them. Many economies outside America are less exposed to the AI boom than they are to bond yields; growth falling by less than interest rates would make legacy debts a lighter burden. America’s deficit would grow in a recession, but so would the world’s appetite for Treasuries, because the dollar is the world’s reserve currency.

By contrast, if high interest rates triggered a sovereign-debt blow-up the consequences would be truly grave. If investors lost confidence in Treasuries, it would threaten the dollar’s valuable status as a haven. As France is discovering, trying to close big deficits under duress can lead to political instability. Governments may prefer to inflate away debt than to pay it down. That could imperil the stability on which all investment depends. A run on sovereign debt in a big advanced economy could well leave investors wishing that a dotcom-style AI bust was all they had to worry about. ■



Eyes in the sky

Closing Europe’s alarming space gap

The region’s dependence on American satellites puts its security at risk

RECENT DAYS have made clear the folly of relying too much for your national security on a capricious private citizen named Elon Musk. Mr Musk is said to have ordered the partial hobbling of his satellite-internet service inside Ukraine. That had two malign effects. It hampered Ukraine’s already limited ability to defend its cities and civilians from fast and deadly Russian drones. It also made it harder for Ukraine to strike back at Russia’s occupying forces.

If President Donald Trump objected to this egregious favour to the Kremlin, he kept quiet about it. America’s allies, in Europe and elsewhere, may reasonably ask how much they can trust the superpower. If, in the future, they need space-based communications systems to defend themselves against attack, can they be absolutely certain that America will supply them unconditionally? The problem, alas, is that no adequate home-grown alternative exists (see Europe section). Europe talks a good game of trying to achieve “autonomy in space”. But that will take time and money, and also require Europe to cut the waste, infighting and duplication that have weighed down its space efforts.

How to get there? First, Europe must have the launch capacity to put large numbers of satellites into orbit. In this, its record so far is poor. It can lift heavy payloads into space on its Ariane rockets, but nowhere near as cheaply or efficiently as Mr Musk’s company does.

Europe’s rocket programme exemplifies flaws of its space ventures. Delays in developing its heavy-lift launcher, the Ariane 6, left Europe without access to space for almost a year in 2023 and 2024. The European Space Agency (ESA), which funds the programme, is partly to blame. It fails to award contracts to the most innovative or efficient suppliers, instead favouring firms from countries that donate the most funds. The programme is also shielded from market forces, getting roughly €300m (\$337m) a year in public subsidies. Small wonder it has been trounced by SpaceX, which last year launched Falcon 9 rockets 165 times, charging private clients \$70m a pop, while Ariane charges more than \$90m despite those subsidies.

To fix this, the ESA is tentatively copying America’s space agency, NASA, which decades ago encouraged the growth of commercial space firms by switching from “cost-plus” con- ►►

► tracts for developing rockets to buying fixed-price launch services, a policy that let Mr Musk's SpaceX flourish. The agency has awarded contracts to three rocket startups. Mergers, such as the proposed tie-up of three of Europe's biggest satellite-making businesses, could follow. But can Europe create a firm big enough to compete globally without reducing competition at home?

Europe's second priority should be to create a rival to Mr Musk's Starlink, and to do so without policies that drive up prices and stifle innovation. OneWeb, a firm part-owned by the British and French governments, already provides some services similar to Starlink's. The European Union is going ahead with IRIS², a €16bn project to deploy 348 satellites to provide secure communications to governments and armed forces. Yet even this suffers from fragmentation and duplication. Germany plans to build a swarm of 100 military-communications satellites at a cost of about €10bn, while France and Britain are investing in their own smaller programmes. It would be wiser for

all to pool their demand for satellite services.

Some governments will insist on having such systems under national control. Yet their concerns could be met by building satellites to common standards, so that they are interoperable. Countries or blocs could own these, but by linking them together, all would benefit: larger fleets would mean more resilience and greater coverage. Examples of this are already in orbit, such as small radar satellites built by Iceye, a Finnish firm. It offers customers a "federated model", in which they can choose how much to share intelligence and co-ordinate where their satellites focus. Such an approach should encourage like-minded middle powers beyond Europe, such as Canada, Japan and South Korea, to co-operate too.

Europe need not stop there. The more it builds up its own space capabilities and shares them with America, the more convincingly it can show that an alliance of democracies is valuable. If so, despite Mr Trump's instincts, America would have much to lose by holding its allies to ransom. ■

Indonesia

The perils of Prabowo

Indonesia's populist president is losing his grip

AT THE FIRST anniversary of his inauguration two years ago this week, 81% of Indonesians told pollsters that they approved of Prabowo Subianto, a former general who is their eighth president. Now only 45% do. Many Western leaders would kill for that number, but in Indonesia's deferential culture it marks the steepest fall in support for a president since the return of democracy in 1998. How has it all gone so wrong?

First, investor confidence has collapsed. The Indonesian stock market has plunged by 40% so far this year, making it the world's worst-performing. On October 16th MSCI, a financial-analytics company, threatened to dump Indonesia into its lowest grade of market, along with such shrapnel-scarred places as Lebanon and Ukraine. Mr Prabowo's government, it says, has not done enough to end pump-and-dump schemes and insider trading. The currency is at its weakest for two decades. Flows of foreign direct investment (FDI), which soared under Mr Prabowo's predecessor, Joko Widodo (known as Jokowi), as he courted Chinese miners, have been disappointing. FDI ought to be roaring, as it is in nearby Vietnam and Malaysia, on the back of the AI boom and strong global trade. But Mr Prabowo's erratic rule is making Indonesia a tricky place to do business (see Business section).

Second, Mr Prabowo has done little to cure underlying economic maladies. A broken labour market has become worse on his watch, with falling middle-class real wages, a huge black market and high levels of graduate unemployment. A growth target of 8%, always ambitious, is far out of reach. Mr Prabowo's main initiatives have proved wasteful (a \$13bn-a-year free-school-meals programme) or complicated and unnecessary (plans for 80,000 state-run village co-operatives). Such gimmicks used to be popular; recent polling shows that voters, having sampled them, are no longer so impressed.

If Mr Prabowo cannot get the economy right, he risks alien-

ating political elites—a third problem. Already, party bosses are considering moves against him (see Asia section). Mr Prabowo won in 2025 thanks only to the endorsement of his predecessor and former rival. However, Jokowi and the general now appear to be at loggerheads. Some officers linked to Mr Prabowo are seeking the removal of his vice-president, who is Jokowi's son. Indonesia's other two living ex-presidents are said to be manoeuvring, too. The political stability of Mr Prabowo's first two years in office may not last.

Mr Prabowo can still count on the backing of the army and the police. He used to command Indonesia's special forces and was alleged to have made dissidents disappear in the 1990s, an accusation that he furiously denies. Some fear he will be tempted to use dirty tricks to suppress dissent again. Hints of this are already visible. In the weeks leading up to planned demonstrations on the second anniversary of his inauguration, on October 20th, police and soldiers allegedly bribed activists to stay off the streets. Assaultants beat up one of the protest's main organisers. Police say they are investigating but have yet to identify any culprits.

Writing a guest column in *The Economist* in June, Mr Prabowo declared that he welcomed criticism and that Indonesians deserved better than the 5% growth of previous years. He is right to aspire to more. Indonesia, the world's fourth-most-populous country, has almost 290m people, immense resources, a huge market and boundless potential.

Unfortunately, the main obstacle to it fulfilling that potential is Mr Prabowo himself. Indeed, expectations are now so low that even minor policy improvements could lift investors' confidence. Steadier stock and currency markets could alleviate some of the political pressure, too. But for Indonesia to hit its stride, Mr Prabowo must recognise that his populist approach has run out of road. ■





Jane Leighton
BEFORE CREATIVE INDUSTRIES
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Director of AI4I

Italian Institute of Artificial Intelligence for Industry
Turin, Italy

AI4I seeks a leader to shape its scientific and technological development and deliver industrial impact. Supported by long-term public funding, the Institute connects AI research, engineering and industrial adoption.

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Empowering the innovators of tomorrow

Designed to equip future generations with essential tech and IT skills, Samsung Innovation Campus aims to help young people across the world prepare for careers in emerging technologies. Hear from three participants about the most valuable lessons they learnt from the programme.

Opening doors: How one Indian student found her voice and is helping others find theirs

I've always loved mathematics. To me, it's more than just numbers and formulas, it's a way of identifying hidden patterns and using them to solve meaningful problems. My passion led me to pursue a master's degree in computer applications, which provided me with a strong technical foundation.

However, I felt that this alone wasn't enough to meet the rapidly changing demands of the global technology sector. Companies wanted more than academic knowledge; they valued confidence, creativity and problem-solving skills. As someone who wanted to work in tech, I believed that enrolling in Samsung Innovation Campus could help me bridge that gap.

The six months I spent at Samsung Innovation Campus were transformative. I learnt about AI, machine learning and computer programming, all taught through a combination of structured sessions, practical activities, assignments and project work.

The most significant change I saw in myself was my confidence. At the start of the programme, I was shy about speaking up in a group. But the instructors and mentors created a supportive environment, and constantly encouraged me. Gradually, I became more comfortable sharing my ideas with others, and today I feel much more secure expressing my opinions.

Samsung Innovation Campus helped me and other women see ourselves not only as students of technology, but also as future engineers, innovators and leaders. In the future, I want to continue advocating for young women through mentoring, conducting workshops, speaking at conferences and sharing my journey.



Rajani Kusumanjali
Samsung Innovation Campus

Over the course of the six-month programme, she developed a newfound confidence that she will carry into her role as a systems engineer at one of India's largest IT services companies.

Inclusive technology: How one Turkish student is applying AI to accessibility

I first came across Samsung Innovation Campus while I was applying for a master's degree in AI. The practical, solutions-oriented approach appealed to me, and I felt it could help strengthen my skills and give me a stronger foundation for my postgraduate studies.

The programme kicked off with a five-week programming and coding course, followed by an AI course, both of which gave me valuable hands-on experience solving practical problems. Programming concepts can sometimes feel abstract; previously, I struggled to envision how I would apply my theoretical knowledge to real life, so it really helped that instructors connected our learnings to real-world examples.

The highlight was a capstone project I worked on with four other students. Together, we wanted to use AI to improve accessibility and inclusivity. Integrating skills Samsung Innovation Campus taught us—programming, problem-solving and project planning—we developed an app designed to help people with disabilities navigate urban environments more easily in their daily lives.



Nisa Nur Taş
Samsung Innovation Campus

The course, which covered programming, coding and AI, helped her gain technical confidence and reinforced her belief that AI can, and should, be used to improve people's lives.

After attending Samsung Innovation Campus, I started to really see technology, and specifically AI, as a tool that can solve social challenges and make a difference to people's daily lives. The programme reinforced my belief in the importance of human-centred technology, and inspired me to think more about accessibility and inclusivity.

Looking ahead, I hope to apply AI in the field of health care. Samsung Innovation Campus helped me become more confident in turning ideas into real solutions. I can't wait to show the world how technology can be used to make a meaningful difference in society.

Bridging science and AI: How one Peruvian student is working to improve public health

During my bachelor's degree in biology, I became fascinated by bioinformatics—the use of computing and mathematics to process and analyse complex biological data. There was one problem: I had no experience in computing nor knowledge of any coding languages. That's why Samsung Innovation Campus caught my attention: a free, tech-training programme, it seemed like the right place to strengthen my technical skills.

Attending Samsung Innovation Campus alongside my university studies meant that I was able to make faster progress in my research. For three afternoons a week, I learnt how to code and interpret medical imaging data. On the other days, I applied what I had been learning, including Python and machine learning, to my school's bioinformatics classes.

Equipped with new skills, I was inspired to explore how I could combine my passions for science and technology. I'm currently applying AI models to my immunology research, and using machine learning for bioimage analysis that could help with the diagnosis of diseases.

Looking ahead, I want to become a specialist in bioimaging analysis, with a focus on infectious diseases. I also want to improve scientific literacy, erasing the distance between science and the people who need it most.

By providing access to AI and coding classes, Samsung Innovation Campus allows students like me, who are not studying technology, to develop a more interdisciplinary approach to our studies. I plan to use what I have learnt from the programme to support public health and disease prevention, and make science a tool for progress and hope.



Fabricio Chimoy Ayala
Samsung Innovation Campus

The programme sparked an unexpected interest in technology for him, and opened up new possibilities for research and real-world application in public health.



Samsung Innovation Campus is Samsung's global education programme that equips young people with advanced IT skills and practical capabilities to expand their career opportunities and grow as future tech talent.

To learn more, visit bit.ly/future-is-you or scan the QR code.

Letters *effective altruism, lessons from gun laws, expensive rock concerts, human responsibility for AI, public debt*

Effective altruism in use

The doctrine of effective altruism tells charities to spend their money to produce the largest possible benefits ("The century's biggest idea", October 3rd). But a much bigger idea says that governments, too, should be doing just that.

This idea is rapidly taking root. In Britain it is what the Treasury's Green Book now adheres to. So when departments ask for money they have to estimate the benefits that the spending will produce and show how that compares with the cost to the taxpayer. And the benefits have to include not just increases in income but all those non-monetary things that make our lives worthwhile; health, safe streets, a job and so on. All of these non-monetary things are to be evaluated in units of life satisfaction, before they are translated back into their monetary equivalents.

In this way Britain is leading the world, by including all well-being benefits and applying this test to all expenditures, current as well as capital. This is a huge movement towards more rational government. As a recent report from the London School of Economics shows, this approach, if followed through in decision-making, would require major shifts in priorities. Let us hope these can be reflected in the next spending review.

PROFESSOR LORD
RICHARD LAYARD
Co-director
Well-Being Programme
Centre for Economic
Performance
London School of Economics

Will MacAskill defends effective altruism without apparently noticing how far his moral reasoning depends on his own standpoint (By Invitation, October 10th). The very idea of a tithe presumes an ability to pay, which depends on one's

existing circumstances, and the whole enterprise rests on the worldview afforded by its adherents' predicament and education. It is no accident that people such as Mr MacAskill sit at the forefront: Oxford-trained, with the time and, comparatively speaking, the money to contemplate the plight of others.

Living in Africa has opened my eyes to the Elastoplast effect of sporadic injections of money, which can lift even large numbers of indigent people for a time, but with little or no lasting effect.

On a microscopic scale, I give every day to a man who sleeps in a bus shelter. The effect is superficial and transitory. He is back every night until the police move him on, because structural unemployment and political stasis leave him with no prospect of work. Effective altruists say that large-scale giving can have high expected value, but where poverty is politically and economically induced, well-mean-

A gig's gigabyte memories

Pop and rock stars who demand that fans put away their phones at concerts are not considering the price of a ticket ("Crowd control", September 19th). Musicians are charging extraordinary prices for the privilege of seeing them perform. Last year I paid more than \$300 to see Sir Paul McCartney in Las Vegas. For that money I want to leave with more than a T-shirt and a programme (another \$50 each). I want photo and video memories of what I experienced, captured on my phone and available to me long after the T-shirt has worn out.

The Grateful Dead understood that recordings could extend the experience rather than diminish it,

ing giving makes no substantive long-term difference.

Without change at that level, nothing the effective altruists dream up will endure.

D.A.L. COLDWELL
Professor of management
University of the
Witwatersrand, Johannesburg

We need more police

America's gun violence will continue, you say, until voters follow Australians and Britons "and decide they have had enough" ("Under the gun", October 10th). The truth is messier. From 2005 to 2008, nearly a decade after Britain banned most handguns, I was a detective superintendent in Lambeth, south London, where young gang members favoured machine pistols, firing them from passing cars. Local officers and the wider Metropolitan Police worked with community groups to stop the shootings. In December 2025, in Sydney where I now live, two gunmen killed 15 people at Bondi Beach. The older gunman held a firearms licence and owned six guns lawfully.

Lambeth showed me the limits of a ban, and Bondi has shown Australians the limits of a licence. Strict laws have made both countries safer, yet each leaves a gap that falls to the police and the communities

famously allowing, and even encouraging, fans to tape their concerts. Today's artists should recognise the value of allowing fans to do the same. If I'm paying hundreds of dollars to be there, I'd like to decide how much of the experience to preserve.

JASON RUSSELL
Lehi, Utah



they serve, which is why Malcolm Gladwell's point about the size of European police forces is worth taking seriously. Crime fell in central London when almost a third more officers were put on its streets after the bombings of July 2005. In Philadelphia a randomised trial found that foot patrols on the most dangerous corners cut violent crime by almost a quarter, though the gains vanished when the officers left.

Neither case isolated shootings, yet both show what visible policing adds to the law. America, with far more guns than either country, needs both.

JONATHAN TOTTMAN
Sydney

The moral impetus behind AI

How should the law handle intent when robots act beyond their users' control ("Unsuitable", October 10th)? Consider the drunk driver. Getting black-out drunk doesn't remove responsibility. The law traces culpability back to an earlier decision by an agent capable of making it; the pre-drunk self deciding to put the future self in that position. Why should autonomous systems be any different? A machine can't bear moral responsibility. It sits with the human who exercises judgment in deciding to delegate authority to it.

LIAM TALBOT
Bristol

Sweet tooth, sour economy

Regarding the looming government-debt crisis ("Will bonds blow up?", October 10th), politicians will not treat voters like grown-ups until voters start behaving like grown-ups. Voters consistently want leaders who offer them candies and sweets, without understanding that this will only lead to the dentist's drill.

VERA HUTZULIAK
Mississauga, Canada

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BY INVITATION

Frances Lee

Ignore the doomsayers. American democracy is in good shape

AMERICA'S TWO main parties do not agree on much, but they share a slogan. "We've got to be too big to rig," Kamala Harris told an audience recently. Days later Donald Trump called for a midterm win "too big to rig" because "they rig elections in this country." Both parties urge their own supporters to vote while warning that the other side cheats. Scholars and journalists, meanwhile, have settled on a diagnosis: democratic backsliding.

Many voters themselves are anxious. Looking towards the midterms on November 3rd, only 49% of respondents expect a free and fair election. Under Mr Trump's influence Republicans are especially cynical. Democrats worry about election interference from his administration. Minority voters fear harassment from Immigration and Customs Enforcement agents at polling stations.

Anxieties notwithstanding, American elections are healthier than the backsliding narrative allows. Indeed, there was also considerable anxiety in advance of both the 2022 and 2024 elections. Then, as now, Americans worried about election interference, voter fraud and political violence. But in the end turnout was high by historical standards and the vast majority of Americans expressed confidence in the outcomes.

American democracy rests on durable institutions capable of checking concentrated power. Midterm elections are important in this regard. The "midterm law"—that the president's party loses seats midway through his term—has held in 20 of the 22 votes since 1938. Mr Trump's first term followed the pattern: Republicans lost their majority in the House of Representatives in 2018.

Notably, the president's party loses seats in midterms even when most Americans approve of the president's performance. The penalty grows when the president is unpopular and the economy weak. Mr Trump's approval rating languishes in the mid-30s. In September consumer confidence fell to its lowest level since 2014, partly owing to high fuel prices. Across midterms since 1992 the president's party has lost an average of 25 House seats. The current Republican majority disappears with a net loss of three.

In an effort to forestall losses, Mr Trump induced Republican-controlled states to redraw their electoral maps. The resulting gerrymanders probably netted some Republican seats, albeit fewer

than they had hoped. But here again American institutions retain safeguards against a president's effort at electoral deck-stacking. A president can demand new maps only in states where his party holds the pen, and Democrats in California answered a gerrymander in Texas with one of their own. The Cook Political Report projects a net Republican gain of four seats from redistricting, not nearly enough to protect the party's House majority.

Mr Trump floated and later disavowed the idea of postponing or cancelling the midterms. Regardless, that scenario was always wildly implausible. Election day is fixed by federal statute, and the constitution sets the date when office-holders' terms end. The decentralised administration of elections across thousands of local jurisdictions denies the president any easy lever to manipulate outcomes. Mr Trump's attempt to turn the postal service into such a lever against mail-in ballots was thwarted by the courts.

More likely than interference with the election is that unsuccessful office-seekers will refuse to concede, claiming their opponents cheated. Nothing is more basic to democratic legitimacy than the loser's consent. Many feared that Mr Trump's refusal to concede in 2020 would spread across the political system. It has not. Bright Line Watch, a research group, examined all 884 congressional races in 2020 and 2022. The overwhelming majority of losing candidates publicly acknowledged defeat. Explicit refusals were concentrated among first-time candidates who had lost by wide margins. And there were fewer such refusals in 2022 than in 2020. Candidates with political careers to protect still concede. When they do, complaints of election "rigging" lose their force.

None of this is cause for complacency. My research with Geoffrey Layman and Christina Wolbrecht finds that party activists, long regarded as guardians of democratic norms, are now no more committed to losers' consent than ordinary citizens. Any deterioration in basic democratic values is worrying.

Nevertheless, the record of American elections since 2020 has been encouraging. Election administration has improved. Although many career administrators resigned amid increased harassment after 2020, the voters' experience actually got better. In both 2022 and 2024 the share of people waiting more than 30 minutes to cast their ballot was lower than in 2020, and the long-documented racial gap narrowed: by 2024 black, white, Hispanic and Asian voters reported comparable waiting times.

Overall, the evidence points to a resilient democracy. That resilience rests not on politicians' restraint but on institutional arrangements that are difficult to manipulate: fixed election dates, decentralised administration and officials independently elected in their own constituencies, with their own interests to protect.

James Madison defended the House's two-year terms as giving Congress "an immediate dependence on, and an intimate sympathy with, the people". That dependence will be on display in November. Democrats are favoured to win a House majority. The Senate, which looked safely Republican last year, is now in play. If control of either chamber changes hands, Mr Trump will have to bargain with Congress to fund his priorities and face its oversight for the rest of his term. Midterm elections are a routine check the constitution imposes on every president. Whatever else has weakened, that guardrail holds. ■

Frances E. Lee is a professor of politics and public affairs at Princeton and the author of "A Case for Congress," "The Limits of Party" (with James M. Curry) and "In Covid's Wake" (with Stephen Macedo).

Briefing The wars fuelled by Saudi Arabia and the UAE



The petty feud wrecking a region

DUBAI

Emirati-Saudi rivalry is prolonging and deepening deadly wars in Sudan, Yemen and elsewhere

TO THE EAST of the Arabian peninsula, along the shores of the Persian Gulf, war is simmering, in the form of America's on-again-off-again conflict with Iran. Iranian missiles have rained down on Arabian cities and infrastructure and continue to menace shipping in the Strait of Hormuz, the peninsula's economic lifeline. But it is to the west and south, in the countries along the shores of the Red Sea and the Gulf of Aden, that fighting is really raging.

Yemen's 12-year-old civil war is spilling beyond its borders, with rocket attacks on ships in the Red Sea and on oil terminals and airports in Saudi Arabia. On the far side of the Red Sea, the civil war in Sudan has claimed hundreds of thousands of lives and forced some 11m of the country's 50m people from their homes. Farther south, yet another civil war, in Ethiopia, threatens

to become a regional one, as forces from Eritrea join the fighting. These wars, in turn, aggravate divisions in neighbouring countries such as Libya and Somalia. It is a vast zone of devastation (see map on next page), with destruction and killing on a scale far exceeding that of the war on Iran, or even the conflicts in Gaza or Ukraine.

The Arabian peninsula's two biggest powers, Saudi Arabia and the United Arab Emirates, tried to avert the war in Iran, fearing—rightly, it turns out—that they would get caught in the crossfire. But instead of trying to quell the wars to their south and west, they have fuelled them, taking sides and funnelling support to favoured factions. Extraordinarily, given their similar geopolitical interests, Saudi Arabia and the UAE sometimes support opposing forces in the same conflict, in-

tensifying and entrenching wars that were already grotesquely bloody. Even when they are theoretically on the same side, as in Yemen, the pair often fail to co-operate, helping draw out the misery and bloodshed. Not even the existential threat posed by the war in Iran, which has throttled their oil exports and shredded America's security umbrella, has convinced the two countries to put their differences aside. Instead, their petty rivalry is abetting the demolition of a vast region of 250m people.

Royally screwed

The conflicts in question are vicious. In Yemen, as in Sudan, hundreds of thousands have died and millions have been displaced. The civil war in Ethiopia is on an only slightly smaller scale. All three have involved famine, massacres and other ►►

► atrocities. Not all this bloodshed stems from Emirati and Saudi meddling by any stretch; all three conflicts reflect long-standing divisions within the countries concerned. Nor are the two Gulf monarchies the only meddlers: Egypt, Israel and Turkey, among others, have eagerly stuck their oars in. Yet the Saudi and especially the Emirati involvement stands out as destabilising and short-sighted.

Saudi Arabia and the UAE could scarcely have more in common. They are neighbours, sharing the same language, religion and culture. They are both wealthy, absolute monarchies whose fortunes depend on the steady export of oil and the steady military support of America. They are both trying to diversify their economies away from hydrocarbons. They both face the same geopolitical threat, a hostile Iran, and the same domestic quandary, keeping their citizens happy without democracy.

Muhammad bin Salman, the crown prince and de facto ruler of Saudi Arabia, and Muhammad bin Zayed, the emir of Abu Dhabi and president of the UAE, also have a lot in common. They are both younger siblings, not initially raised in the expectation that they would rule. They both cast themselves as modernisers, bringing development to their countries. They both fancy themselves as statesmen, wielding influence in their region and beyond.

Perhaps that is why MBS and MBZ, as they are often known, used to get on so well. In 2017, when MBS staged a palace coup at the age of 31 to become ruler of Saudi Arabia in all but name, he had help from MBZ, who had largely taken control of the UAE after his older brother, Khalifa, suffered a debilitating stroke in 2014. The Emiratis worked to promote MBS in America, where many officials had their doubts about the young, impulsive crown prince. Diplomats described the relationship between MBZ and MBS as that of mentor and protégé, or elder and younger brother. They worked together to impose their will on the region, sending troops to Yemen in 2015 and blockading Qatar in 2017.

The mentorship did not last. Cracks began to appear in 2019, when the UAE withdrew some troops from Yemen. More disagreements followed. The Emiratis established ties with Israel in 2020, whereas the Saudis did not. In 2021 they argued over trade barriers, production quotas at the Organisation of Petroleum Exporting Countries (OPEC) and a Saudi push for firms to move their regional headquarters to Riyadh, at the expense of the Emirates.

Some of these disagreements endure. Take oil. The Saudis need prices above \$90 a barrel to balance the budget and pay for costly schemes to diversify the economy (see Middle East & Africa section). They want OPEC to impose strict production caps to keep prices high. The UAE, in con-

trast, can balance its budget at around \$50 a barrel. It would prefer to sell more oil now, even at lower prices, lest its reserves become worthless in the future. After years of bickering about quotas, the UAE finally left OPEC in April.

Saudi Arabia's diversification effort has also brought it into competition with the UAE. Both seek to be regional hubs for finance, trade and travel, and big forces in AI and alternative energy. The Emiratis have a decades-long head start, however, and they are keen to keep their edge.

Royal curt

But there is at least as much injured pride as there is substance to the royal rivalry. Saudi Arabia sees itself as the pre-eminent power among the Gulf monarchies. It is the most populous of the six, with more citizens (20m) than the other five combined and by far the biggest economy. This attitude grates on the Emiratis, who have come to see themselves as the Gulf's real success story: their economy is more diversified, their army more professional and their society more open.

Though court politics are opaque, personal animosity appears to play a part in the Saudi-Emirati rift. Diplomats say the two rulers often go months without speaking. They make a point of avoiding each other's capitals. MBZ skipped a summit with China's president in Riyadh in 2022. MBS returned the snub a month later when Arab leaders gathered in Abu Dhabi. In recent years the Emirati leader has visited Azerbaijan more often than Saudi Arabia.

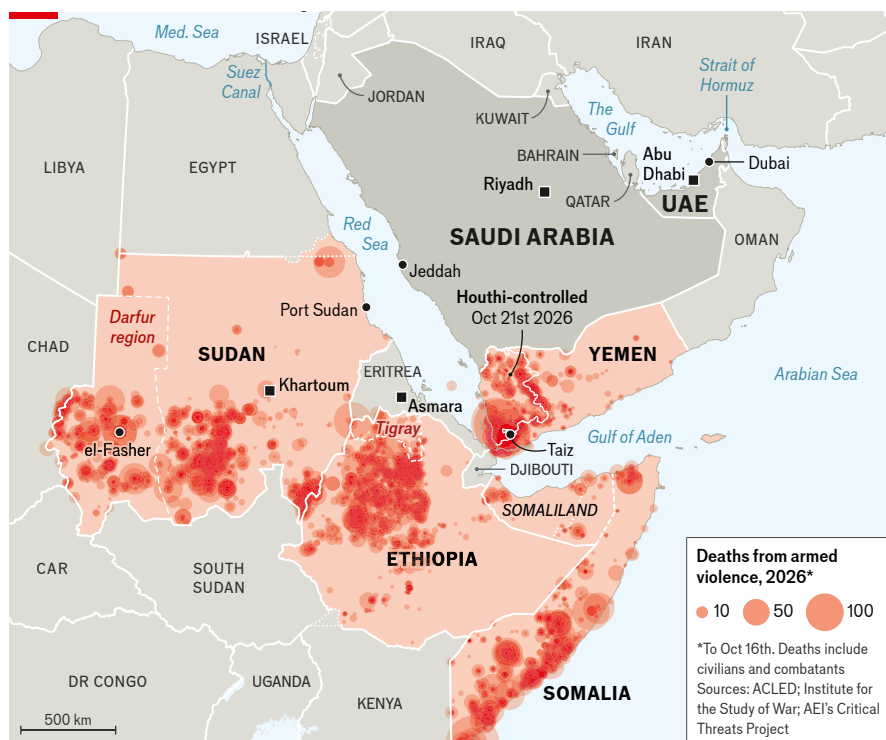
Perhaps the most churlish element of

their competition is foreign policy.

A decade ago Saudi Arabia and the UAE were allies fighting the Houthis, a Shia militia that had seized much of Yemen in 2014. They backed different factions in the anti-Houthi camp: the UAE aligned itself with separatists who seek an independent south Yemen, whereas the Saudis backed Islah, an offshoot of the Muslim Brotherhood, and tribal groupings in the north. But they managed to find common cause.

In December, though, the separatists launched an offensive against their supposed allies. The Saudis worried that they might attempt to secede. They eventually pushed the separatists back and forced the UAE to withdraw its troops from Yemen. Now they find themselves battling the Houthis without the UAE, although in recent weeks the Emiratis have hinted that they may rejoin the fight. The Houthis, meanwhile, have been advancing against their divided opponents. This week they killed more than 70 recruits to the Saudi-backed forces in a rocket attack on a training camp. They have also encircled the city of Taiz, trapping some 600,000 civilians with little food or medicine.

Even worse is the damage inflicted on Sudan, where the UAE's adventurism and Saudi intransigence are prolonging a catastrophic conflict. The number of people killed will never be known, but reports from Darfur, an especially war-torn region, give a sense of the appalling toll. During their siege and eventual capture of the city of el-Fasher last year, the Rapid Support Forces (RSF), the militia backed by the UAE, slaughtered thousands of civilians. ►►



► Fighters posted gloating videos of killings on social media. They then dumped the bodies in mass graves to cover up the scale of their crimes and began hunting the few remaining doctors in the city lest they reveal what they had seen and heard while treating survivors (see 1843).

It is hard to square such horror with the Gulf countries' stated interests in Sudan. The UAE, a rich but small country worried about its reliance on oil, sees the Horn of Africa as a potential economic hinterland. It has made investments all along the Red Sea, including in Djibouti, Egypt, Eritrea, Somalia and Somaliland. Before the war, the UAE was drawn by Sudan's ports, precious metals and agricultural land (the UAE imports about 90% of its food).

Saudi Arabia is concerned mainly about instability in Sudan, less than 200 kilometres across the Red Sea at its closest point. It has also invested in agriculture and is keen to preserve trade through Port Sudan. The UAE's growing role in what it considered its backyard made it nervous.

These concerns have grown more pronounced in recent months as the Iran war has disrupted trade through the Strait of Hormuz. But disagreements between the two Gulf countries shaped the war in Sudan from the very beginning. Initially both supported Abdel Fattah al-Burhan and Muhammad Hamdan Dagalo, the two generals who overthrew Sudan's short-lived civilian government in 2021. The princes, perhaps worried that a successful democratic experiment in Sudan might give their own people ideas, seemed to prefer the military regime.

Yet when the two strongmen began fighting each other in 2023 Saudi Arabia supported the Sudanese Armed Forces (SAF), led by Mr Burhan. Meanwhile the UAE, concerned about the influence of Islamists in the ranks of the SAF, threw its weight behind Mr Dagalo's RSF (although it does not publicly admit doing so). That turn of events was not without irony: in 2015 thousands of RSF fighters battled the Houthis in Yemen on behalf of Saudi Arabia. The Saudi payment for the deployment is thought to have helped fund the RSF's battle against the SAF.

The conflict in Sudan might not have lasted so long were it not for the rift between the two Gulf princes. At the outbreak of the war, America and Saudi Arabia convened talks in the Saudi city of Jeddah to broker a ceasefire. Saudi diplomats, infuriated by the Emirati support for the RSF, refused to invite the UAE to the talks. After being excluded, the UAE redoubled its backing for the RSF, bringing it early successes on the battlefield and encouraging Mr Dagalo to keep fighting.

Since the beginning of the war in Iran, a similarly pernicious dynamic has played out in the other direction. The disruption

to traffic in the Strait of Hormuz has sharpened Saudi Arabia's focus on shoring up stability in the Red Sea and preventing the break-up of Sudan—an outcome that has looked increasingly possible since the RSF declared a parallel government in the Darfur region last year. The Saudi position has shifted from mediating a ceasefire between the SAF and the RSF to supporting the SAF outright, says Kholood Khair of Confluence Advisory, a Sudanese think-tank. Saudi support has probably helped the SAF capture some territory from the RSF in recent months and may explain the army's intransigent refusal to consider a ceasefire or even talks with the RSF.

Battle royale

The UAE, meanwhile, may also be helping to foment conflict in Ethiopia. A four-year-old peace agreement between the national government and rebels in the northern region of Tigray broke down in September. The rebels are thought to be getting help from Eritrea, Ethiopia's northern neighbour, whose troops have been spotted on Ethiopian territory. Abiy Ahmed, Ethiopia's prime minister, would like his landlocked country to regain access to the Red Sea via the ports of Eritrea (which was part of Ethiopia until 1993). There are concerns that he may use Eritrea's incursion as a justification for an invasion, sparking a full-blown war between the two sides.

If Mr Abiy does so, it will be thanks in part to the steadfast support of the UAE. Since he came to power in 2018, it has sent billions of dollars in financial aid, investment and weapons. In September alone dozens of flights from the UAE landed in Ethiopia, thought to be carrying supplies for the campaign in Tigray.

Eritrea, meanwhile, has been trying to secure Saudi Arabia's backing. Issaias Af-

werki, Eritrea's dictator, has held several rounds of talks with Saudi officials. The Saudis have thus far demurred. But the RSF is now being accused of using Ethiopian territory to launch attacks in Sudan. That has angered the SAF, which might back Eritrea if Ethiopia attacks, potentially merging the two wars. In contrast, if MBS and MBZ were to reconcile, they might be able to exert pressure on the warring parties to settle their differences.

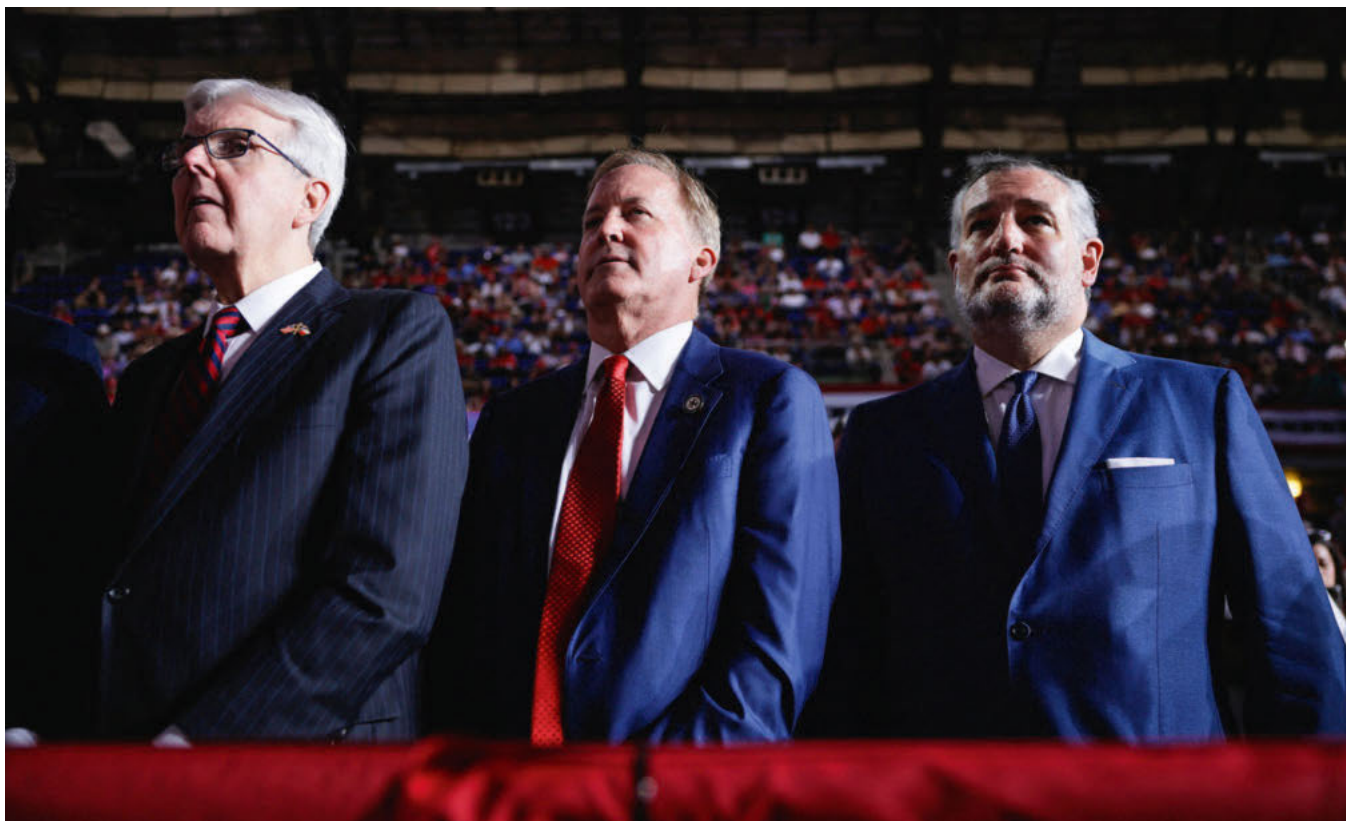
An equally unfortunate dynamic appears to be in motion in Somalia. The UAE's close ties to Somaliland, a break-away province, and other regions run by secessionists have caused a rift with the beleaguered national government, which is courting Saudi Arabia as a counterweight. In the meantime, there are reports of strengthening links between the Houthis and the jihadists of al-Shabab, who are battling both national and provincial forces in Somalia. The Emiratis' short-sighted factionalism, in other words, is certainly not helping to end Somalia's civil war and may in fact be exacerbating it.

Each individual decision that embroiled the UAE and Saudi Arabia in these many conflicts and then gradually pitted them against one another may have seemed rational enough at the time. But the results clearly do not serve either country's interests. The region on their doorstep is poorer, more unstable and more violent than when their interventions began. It presents fewer opportunities for investment and more potential for unwelcome spillovers, of refugees or violence. Their meddling generates ill-will between the pair at a time when their overriding concern should be co-operating to counter the menace of Iran. And it generates untold misery for the 250m people around whom the region's wars are intensifying. ■



With friends like Sudan's...

United States



Red-state politics

Republicans' identity crisis in Texas

FRISCO AND SAN ANTONIO

The old campaign messages aren't working and the new ones are risky

REPUBLICANS IN AMERICA'S biggest red state don't usually have to play defence. But less than two weeks before election day, they are panicking. Ken Paxton, the scandal-plagued Senate candidate, is trailing James Talarico in the polls. Since early September, national Republicans have poured about \$200m into ads in a bid to save his campaign—and their Senate majority. Greg Abbott, Texas's three-term governor, has won past elections by double digits, but this year is being forced to fend off a Democratic challenger, Gina Hinojosa, outspending her six-to-one over the summer. "We're worried about Texas," Donald Trump admitted early this month.

Mr Paxton is a uniquely bad candidate, dogged by investigations and marital infidelity. But he is not Republicans' only problem in Texas. Latinos in South Texas, who swung to Mr Trump in 2024, now appear to be drifting left; soccer moms in the suburbs of Dallas and Houston are tired of the

president's rancour. After more than two decades of unbroken rule, Texas Republicans are struggling to find a winning message—old campaign lines aren't working and the party is trying to whip up the base by questioning if foreigners belong. Even if the party hangs on to power in Texas on November 3rd, its grip is loosening.

Like Republican candidates elsewhere, those in Texas are being dragged down by Mr Trump. The president's statewide ap-

proval rating is -18, according to *The Economist's* tracker. Mr Paxton told donors in September that Mr Trump's midterm convention in Dallas sank his numbers, according to a leaked recording. Mr Abbott was conspicuously absent from a Trump rally in San Antonio on October 7th.

Texas's political identity has long been secure enough to withstand a national leftward tilt. Now Republicans' Lone Star arguments are losing force. For years, calls for border security united Texas Republicans and won over many independents. The party can now boast that the problem has been fixed—border encounters in August were 94% below the average month under Joe Biden. The issue is also less salient. For the first time in a decade, voters rank the cost of living above immigration as the "biggest issue facing the state".

The ferocity of Washington's deportation crackdown doesn't help. "Stephen Miller and the guys calling shots in DC have taken immigration policy from being a net positive for Texas Republicans and made it neutral or negative," says Bill Miller, a Republican lobbyist in the state. After a federal agent killed a man in Houston in July, Mr Paxton offered no condolences.

When the going gets tough, Texas Republicans tend to fall back on bragging about the "Texas miracle", the economic boom unleashed by low taxes and light

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► regulation. In the five years to 2025, at least 184 companies moved to Austin, Dallas and Houston. When Google announced a \$40bn investment last November, Mr Abbott declared the state the “headquarter of headquarters” and promised to make it the “epicentre of AI development”.

Those words now haunt him. This year Texans, like Americans elsewhere, turned against data centres, forcing Mr Abbott to ask the legislature to repeal the tax breaks that helped lure them. Ms Hinojosa, his challenger, pounced on the hypocrisy. Campaigning in towns such as Amarillo and Granbury, where Democrats rarely win, she casts herself as a populist. “Greg Abbott is selling you out,” an ad reads. The governor’s other big policy priority, universal school vouchers, is also unpopular among Republicans in small towns, where public schools are a top employer.

“The classic arguments have run out of steam and a new order hasn’t been born yet,” says James Henson, an Austin pollster. To fill the void, some Republicans are testing a new message that they hope will resonate in November and beyond: “keeping Texas, Texas”. The meaning of that slogan has recently come into focus, as politicians wage war on foreign influences they say threaten Texas from within.

First it was Muslims. Last year Mr Abbott tried to block a mosque in Plano from building a community he dubbed “Sharia city” and designated America’s biggest Muslim civil-rights group a terrorist organisation. Mr Paxton tried, unsuccessfully, to bar Muslim schools from school vouchers. In the Republican primary Mr Paxton beat John Cornyn, the incumbent senator, with the help of an endorsement of Mr Trump and a new line of attack, with ads accusing Mr Cornyn of having a “special place in his heart for radical Islam”.

Then it was legal immigrants. In January, Mr Abbott froze H-1B visa applications at state agencies and universities. Four months later Mr Paxton opened investigations into 30 firms he accused of using “ghost offices” to allow “foreign nationals to invade Texas”. In September Bo French, a Republican running for railroad commissioner (a job that actually involves regulating oil and gas), posted a photo of students celebrating a University of Texas football victory on X—nearly all of whom had brown skin. “The problem is now obviously far worse than anyone imagined,” he wrote. Old-guard Republicans whom the party has ostracised, including Karl Rove and Mr Cornyn, called the post racist. Texas’s top brass didn’t condemn it.

The fight over who belongs in Texas is most heated in the suburbs. There, dizzying growth has transformed Republican strongholds into political battlegrounds that decide statewide elections. Between 2020 and 2025, the Dallas metro area grew

faster than any other in America. The Muslim population grew with it, building cultural centres the size of Walmarts, and the share of people who identify as Hindu roughly tripled. In Frisco, a wealthy northern suburb where a quarter of residents are now Asian, city council meetings turned into political theatre. In public sessions this spring, speakers likened a proposed mosque to a Nazi recruitment centre and called Indians “job stealers”.

The effort fell flat. When a mayoral candidate in Frisco ran on the nativist message in June, he lost by 16 points. “The problems are manufactured in Frisco, and in a lot of other places too,” says Bill Woodard, a former city councillor. The fearmongering, he argues, jars with people’s positive experience of their neighbours. Burt Thakur, the council’s first Indian-American member and a former Trump voter, agrees. “It’s the consultant class doing what they do best,” he says, “which is cleave on dur-

ing election times and try to figure out how to get out the vote.” Polls from the University of Texas show that social issues don’t resonate when petrol prices are high.

Mr Abbott is still expected to be re-elected and Mr Paxton may eke out a win, too—he is reviving a tactic that has worked for Republicans before, saying Mr Talarico, who once said “God is non-binary”, is for “they/them, not you”. But, as national Republicans search for a post-Trump direction, the bitterly fought campaigns in Texas offer a warning. “Texas is the design shop for the future of the party,” says Ross Hunt, a Republican strategist in Dallas. Some Texas Republicans seem to relish the divisive zeal that is Mr Trump’s speciality, but they haven’t convinced voters—beyond the 7% who vote in their primary—that they care about them and their problems. “If we can see that attitude get punished a little bit,” Mr Hunt says, “I don’t think anyone will shed a tear.” ■

Fundraising and the midterms

A green wave

The donations that matter most are flowing one way

REPUBLICANS WERE supposed to have two big advantages in this year’s congressional elections: maps and money. Neither appears to be protecting them from a midterm bloodbath. Despite winning this cycle’s House gerrymandering war and benefiting from a red-hued Senate battleground, polls suggest that Republicans currently trail in both chambers. And new fundraising data should dent conservative hopes that the party’s candidates could close these deficits by swamping

their opponents with advertising in the campaign’s final weeks.

Third-quarter financial reports show a “green wave” of Democratic money alongside the blue wave seen in polling. Excluding self-funding, Republican Senate candidates raised just \$65m from July to September, compared with a whopping \$276m for their opponents. Democrats had a smaller but still commanding advantage in House fundraising of \$226m to \$130m.

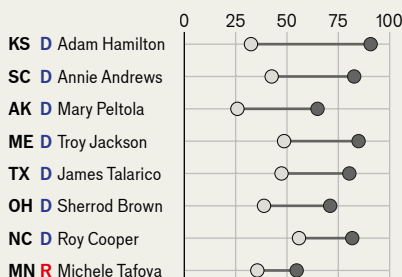
Republicans have offset these shortfalls with a big lead in spending by independent “super PACs”, which are not subject to donation limits. Elon Musk alone gave more than \$200m to such groups in the third quarter. In total, Republican-aligned super PACs have outspent Democratic ones on Senate ads by \$750m to \$317m. However, these groups pay around three times more than campaigns do for advertising, making Democrats’ edge in direct fundraising far more valuable. As a result, according to the Wesleyan Media Project database, there were only 20% more Senate ads favouring Republicans than Democrats during the first half of October.

Moreover, money is not just a cause of campaigns’ success but also a measure of it. The more candidates raise from individuals (whose donations are capped at \$3,500) in their states, the likelier they are to have large numbers of enthusiastic sup- ►►

Another Hamilton fills the treasury

US Senate candidates*, largest outperformances of fundraising benchmarks
% of in-state individual contributions in each race

○ Benchmark ● Projected by Nov 3rd 2026



*Among Democrat v Republican races with projected margins of victory below ten percentage points
Sources: Federal Election Commission; The Economist

porters. Nominee quality cannot be estimated from contribution ratios alone: incumbents generally out-raise challengers, and both parties enjoy big fundraising advantages in their electoral strongholds. But when candidates' contribution shares are much larger than you would expect based on these factors, they often go on to overperform on election day.

By this measure, Democrats have large fundraising leads in almost every competitive Senate race. The most extreme case is Kansas, which has not elected a Democratic senator since 1932. *The Economist's* forecast model reckons that in this year's political environment, a standard Democrat trying to unseat a Republican incumbent in Kansas should get around one-third of in-state individual donations. Instead, Adam Hamilton, a pastor and first-time candidate, has received a stunning 92%.

In two other Senate races the nominees changed during the summer, so no fundraising data were available on the new candidates until recently. In Maine Democrats replaced Graham Platner, who was accused of sexual assault, with Troy Jackson, a former state legislator.

In South Carolina, following the death of Lindsey Graham, the incumbent, Republicans nominated his sister Darline, a political novice. Democrats did remarkably well in these races: each of their candidates received around 85% of in-state contributions.

The only competitive Senate race where a Republican had a clear fundraising edge was Minnesota. Michele Tafoya, a former sportscaster, has received 54% of in-state donations in her contest against Peggy Flanagan, the Democratic lieutenant governor—19 points above the benchmark for a light-blue state in what looks like a deep-blue year. Sure enough, Minne-

sota also looks competitive in polls.

This year's Democratic fundraising advantages are nothing new. During the past four congressional election cycles, the party's Senate candidates have on average run 12 percentage points ahead of our model's benchmarks. Yet Trump-era fundraising data have still reliably identified states where a party went on to beat expectations. This cycle, following the money adds credence to polling showing Kansas and Minnesota as two of the least likely battleground states in recent memory. ■

Presidential nostalgia

Nixon now

WASHINGTON, DC

Why Gen-Z conservatives love Richard Nixon

TO LOOKSMAXXING AND gymmaxxing now add Nixonmaxxing, an activity to stretch your thinking if not enhance it. Slickly edited videos featuring America's 37th president, often set to hip-hop beats, have gone viral in recent months. Influencers are donning baseball caps and tote bags embroidered with slogans like "Pretty Girls for Nixon" and "Nixon Now More Than Ever". Attendance at the Richard Nixon Presidential Library in California is up 30% on last year.

The strange revival of the disgraced late president owes much to the media-savvy millennials running the Richard Nixon Foundation, a non-profit that helps manage the presidential library and, in a newer development, pumps out bite-sized videos. Covering everything from his musings on America's relationship with Russia to his thoughts on his rivalry with John F. Kennedy, the clips have racked up millions of views. "Love seeing these old Nixon videos resurface", reads one comment. "They really show the younger generations what a political genius he really was." Your correspondent, a forlorn Nelson Rockefeller-maxxer, recently spent hours scrolling through content to figure out what's behind the newfound love for Tricky Dick.

Few are hyping up detente or Nixon's creation of the Environmental Protection Agency. In Gen-Z speak, the enthusiasm is mostly down to vibes. The most popular clips capture Nixon's bare-knuckle politics and refusal to give up. Some young conservatives see in Nixon an analogue to Donald Trump: two presidents marked by their antagonistic relationships with the press and hounded by investigators. "The Right's rediscovery of Richard Nixon is not about particular policies," wrote Chris Rufo, a millennial conservative, on X recently;

it's about "the attitude, and the narrative of the self-made man who won 49 states on behalf of the Silent Majority, and was taken down in a Deep State coup."

The Trump administration seems to have a similar view. The Department of Justice is reviewing whether the special prosecutor's office that investigated the Watergate break-in committed misconduct. "If Watergate happened tomorrow it would be like a 12-hour news story," quipped J.D. Vance, the vice-president, during a talk at the Nixon library in June. "The idea that it would have taken down a presidency is crazy."

In embracing Nixon, young right-wingers are also rejecting their elders' worship of Ronald Reagan. The Gipper's faith in free markets and internationalism is at odds with the MAGA worldview. "Reagan is the baby-boomer god," says Curt Mills of the *American Conservative*, a magazine. "And the subtext of so much of what the New Right and younger conservatives think is that old people destroyed this country, and if Reagan is their god, then it must be a false god."

Alas for keepers of the Nixon flame, he remains one of most unpopular presidents in the country's history. A burst of Nixonmaxxing is unlikely to fix his reputation anytime soon. Then again, he has been written off before. ■

Midterm maths

Statistically speaking

Fake polling is problematic—and predictable

BY LATE JUNE, Mallory McMorrow's campaign to be Michigan's next senator was probably already doomed. The Democrat was squeezed between Abdul El-Sayed, a dynamic leftist, and Haley Stevens, an establishment-backed centrist, in a heated primary. When a poll was published showing she had the support of only 9% of registered voters, it seemed to be a death knell. Reporters asked when she would drop out, which she did on July 5th. It now seems that poll was fake.

An investigation published on October 20th by *FiftyPlusOne*, a data-journalism outfit, found that a group called Wedgewood Polls had fabricated its results. The discovery follows another in August, when the *Los Angeles Times* spotted a forged poll on the city's mayoral candidates. *FiftyPlusOne* has also criticised a pollster for manipulating figures to serve its client. The spate of bad polls undermines an industry already widely distrusted. ►►



Getting that green



Another way to count

Lessons from Alaska

How to share a windfall

ANCHORAGE

Divvying up the proceeds of a boom is harder than it looks

OCTOBER IS EVENTFUL in Alaska. Its vast landscapes erupt in a riot of colour, daylight becomes precious and beefy bears rush to fatten themselves before winter. It is also the month Alaskans get a payday. Each October the state government disburses dividends from the investment earnings of its oil revenues. The amount varies, but this October each resident who has lived in the state at least one full calendar year will receive \$1,200.

For half a century Alaska has run an experiment in how to use revenues from its abundant oil resources for the public good. Now, as American lawmakers grapple with whether and how to share the wealth that artificial intelligence might create, the state's experience has new relevance. Proposals to put stakes in AI companies into a public fund, and use the proceeds to pay dividends or finance public services, echo Alaska's approach. But Alaska's Permanent Fund and its dividend offer both a model and a cautionary tale.

The state's good fortune dates back to 1968, when roughnecks drilling at Prudhoe Bay, on Alaska's North Slope, struck oil. Less than a decade later Alaskans voted to create the Permanent Fund, an investment vehicle for a portion of annual mineral royalties. The idea, says Mike Dunleavy, the Republican governor, "was to ensure that finite resources such as oil mining could be converted into infinite revenue for the people of Alaska". In 1980 the legislature created an independent state-run corporation to manage the Permanent Fund's investments. Two years later Alaska began paying the dividend. Today the fund is worth \$90bn, or roughly \$122,000 per Alaskan.

The remaining mineral royalties, along with oil production taxes, are used to finance public services. For a long time the riches seemed inexhaustible. A single lease sale in 1969 raised more than five times the state's annual budget. In 1980 Alaskan lawmakers repealed the state's personal income tax. They have since shunned other broad-based levies on residents. This makes Alaska unique among American petro-states. Others, such as Texas and New Mexico, continue to collect sales or income taxes to finance their spending.

Alaska's utter dependence on the black stuff has left it hostage to fluctuations in the oil price. In 2018, after several lean years, lawmakers decided to use Permanent Fund earnings to help bankroll the

state government for the first time. Now annual draws from the fund account for roughly two-thirds of the state's budget. Lawmakers must haggle over how to divide the oil money between dividends and public services. Brett Watson, an economist at the University of Alaska Anchorage, says Alaska's budgeting has become "zero sum".

Mr Dunleavy was elected in 2018 after promising to restore a long-standing formula linking dividends to the fund's investment earnings, which would have given Alaskans annual payments of more than \$3,000. But lawmakers had stopped following the formula two years earlier, amid a budget crisis. In office, Mr Dunleavy has had to face up to the maths; the average dividend during his tenure has been roughly \$1,500. "Every legislator who gets elected saying, 'I promise you a \$3,000 dividend', once they get down to Juneau, and they look at that budget, they realise you cannot do that," explains Gary Stevens, the Republican state Senate president.

Under Mr Dunleavy, lawmakers have also cut spending on services, both to balance the books and to preserve money for dividends. Deprived of state dollars, cities and boroughs are operating on shoestring budgets. "Many local governments...just close when they run out of money," says Nils Andreassen of the Alaska Municipal League, a non-profit. Lawmakers have long hoped the dividend would help keep residents; some now worry that worsening services will drive them away. The state's net migration has been negative in each year since 2013.

The war with Iran offers a band-aid: higher oil prices are propping up the state budget. Bernadette Wilson, a Republican candidate for governor, is calling for bigger dividend cheques; her opponent, Jonathan Kreiss-Tomkins, a former Democratic state legislator, favours fiscal reform.

When it comes to AI wealth, the debate is only beginning. Bernie Sanders, a senator from Vermont, wants big AI firms to hand over 50% of their shares to a sovereign wealth fund, which would pay Americans at least \$1,000 a year and eventually support health care and other services. The bosses of OpenAI and Anthropic favour donating a more modest 5% stake to a public fund. OpenAI also backs higher taxes on capital gains and corporate income.

An AI fund would not initially face the same fiscal pressures as Alaska's Permanent Fund: America, after all, still collects federal income taxes. But Alaska's predicament shows the dangers of relying too heavily on a single source of revenue, and how easily dividends can become a political football. Donald Trump is already dangling a "Trump dividend", unrelated to AI, if Republicans win the midterms. Just vote for the party's candidates, he implored recently, "and you will each have \$5,000". ■

▶ Wedgewood published 15 public polls ahead of the midterm elections. Then *FiftyPlusOne*—led by G. Elliott Morris, a former journalist at *The Economist*—received a tip that the data were fake. Mr Morris and his colleagues confirmed the forgery by comparing Wedgewood's figures with data from a provider the firm had supposedly employed. Mismatched identification numbers gave the scammers away. When *FiftyPlusOne* requested a comment from Wedgewood, the firm claimed it had forged the polls to "demonstrate the vulnerabilities" of the industry.

Whatever Wedgewood's motive, there are many reasons to fake polls. One is to earn easy money by selling fraudulent services to campaigns and political groups, which tend to spend heavily on public-opinion research; another is to manipulate prediction markets, where billions are bet on elections. Fake polls can also be used to influence elections themselves, for example by making candidates seem unviable. Ms McMorrow claims that donations struck up after the fraudulent poll was published.

With so much cash coursing through elections in America, the incentives to fake polls are greater than in other democracies. However, oversight is weaker. In Brazil, South Korea and France, for instance, pollsters must submit information to national authorities that monitor their work. In August the Brazilian Superior Electoral Court upheld a R\$53,000 (\$10,600) fine for a polling firm that had released insufficient information about a poll, despite there being no suggestion that its results were misleading. America's wild-west approach has benefits—the industry is more dynamic and understanding of public opinion is deep. But the country's pollsters already faced public scepticism. The latest fiasco won't help. ■

Urban politics

The city-hall socialists

LOS ANGELES AND NEW YORK

Can leftist mayors be both radicals and realists?

ON A SWELTERING October Sunday in Los Angeles Nithya Raman, a city-council member running for mayor, laid out her vision for America's second-largest city. Ms Raman (pictured) is affiliated with the Democratic Socialists of America (DSA). Yet the dream she described to Angelenos was not of "ending capitalist oligarchy", part of the DSA's platform, but of competence. "City government has made solving problems look impossible for so long, people are starting to believe it is impossible," she lamented, before rhapsodising about homelessness audits and cutting red tape. Her slogan, far from being revolutionary, is simply: "A city that works".

Donald Trump has long derided cities run by Democrats as crime-ridden hells; it would seem a political gift that a growing number are either already led, or will soon be led, by Democratic Socialists, whom the president calls "crazed lunatics and radicals". But even as Republicans try to use socialism to undermine Democrats' appeal, a new crop of pragmatic city socialists insist they will do the opposite.

Zohran Mamdani of New York is the most famous of this group—even Mr Trump has proved unable to resist the magnetic mayor, holding a chummy press conference with him in September that enraged Republican strategists. But along with Mr Mamdani there is Katie Wilson, elected last year to be mayor of Seattle, as well as Janeese Lewis George, the Democratic nominee all but sure to be the mayor of Washington, DC. In LA Ms Raman is in a fierce campaign against the incumbent Democratic mayor, Karen Bass. These four are all millennials either aligned with, or members of, the DSA. All four have also, either of their own volition or pushed by external factors, inched to the centre.

A pragmatic socialist may seem like an oxymoron, but America has a tradition of them. Mr Mamdani and Ms Wilson have spoken admiringly of the "sewer socialists" of 20th-century Milwaukee, who downplayed revolutionary rhetoric while trying to improve sanitation and parks. Today's leftists have rebranded this strategy as "sidewalk socialism" or "pothole politics". Ms Raman, for example, is fixated on repairing broken streetlights, a symbol of LA's dysfunction. Unlike DSA members in Congress, who specialise in bold, inconsequential positions, socialist mayors must contend with their cities' problems.

This does not mean abandoning populism. Mr Mamdani is rolling out a tax on pied-à-terre—earlier this year he posted a video celebrating the prospect of a new levy on the \$238m penthouse of Ken Griffin, a hedge fund boss. But more basic concerns are the priority.

Take public safety. Even progressive voters doubt the logic of abolishing the police, as the DSA has suggested. Ms Lewis George once wanted to cut police funding; now she highlights her career as a prosecutor and promises to "support law enforcement". Mr Mamdani kept his predecessor's competent police commissioner, Jessica Tisch, and continues to stand by her despite her status as a DSA *bête noire*. "He knows that allowing crime and disorder to spiral out of control would take New Yorkers' focus away from his affordability message," explains John Ketcham of the Manhattan Institute, a conservative think-tank.

On housing, the four speak as ardently about slashing red tape as they do about squeezing landlords. Mr Mamdani's efforts have earned the praise of local developers. In LA Ms Raman is an urban planner who embraced the YIMBY movement while serving on the city council. She wants to reform a "mansion tax" she once championed, as it has helped depress development. Her about-face impressed Dave Rand, a land-use lawyer who represents developers. "I don't want an ideologue," he notes. "I want someone who's going to adjust to the facts on the ground."

In Seattle, Ms Wilson campaigned on new taxes on capital gains and vacant properties. But her proposed budget would plug the deficit, cut city jobs and increase police spending. The business lobby cheered. Democratic socialists "may have values that are anti-capitalist", says Joe Nguyen, of the Seattle Metro Chamber,

"but they exist in a capitalist regime". Ms Wilson is forthright about her evolution from activist to politician. "I've had to do a lot of work this year building relationships with the business community that I didn't necessarily need to have, or cultivate, as an organiser," she admits. "As the mayor, everyone's problems are my problems."

A less charitable interpretation is that leftist mayoral candidates are better at promising than governing. Mr Mamdani made fast, free buses a centre of his campaign. One year on, he's focusing on the fast. Ms Lewis George's ambitious plans for Washington are running into the reality of the city's dismal finances, flagging economy and limits under federal law.

If these shifts come as a relief to business leaders, they can outrage the base. This month *The Stranger*, a newspaper in Seattle, asked: "Is mayor Katie Wilson still a socialist?" Israel and Palestine have little to do with municipal governance, but Mr Mamdani's criticisms of the war in Gaza energised progressive voters during his campaign. When he attended a vigil for the Israeli victims of the October 7th attacks, protesters heckled the mayor and called him a "traitor".

Some members of the DSA's chapter in LA reckon Ms Raman is insufficiently anti-Israel, too, and are suspicious of her support for market-rate housing. During a recent meeting at a church in Hollywood, every other DSA candidate on the ballot got louder cheers. A young woman next to *The Economist* placed a blank canvassing sign-up form under her pew. "I'm not interested in campaigning for Democrats," she explained. A century ago Milwaukee's sewer socialists were derided by other leftists for their "bourgeois" worries. But the concerns were real. And those other leftists remained on the fringe. ■



Socialism with a smile

LEXINGTON

Why believe this column?

A new documentary about Elizabeth Holmes, like Donald Trump's presidency, raises questions about what's true



“WHAT IS THE reality?” asks the disgraced entrepreneur Elizabeth Holmes near the start of Nathan Fielder’s new documentary, “You Can See Everything”, about the 34 days he spent with her before she reported to serve a prison sentence for fraud in 2023. And the audience member thinks, *Oh no, here we go again.*

Or, at least, so thinks that audience member who has grown weary of this endless post-modern era, of being reminded that objective truth is elusive, that one’s purchase on reality is determined by whichever narrative one chooses to believe. By the end of this ingenious, absorbing film, Mr Fielder and his co-director, Lance Oppenheim, have not only questioned whether Ms Holmes is truly guilty of defrauding investors by claiming, as the founder of the blood-testing company Theranos, to have revolutionised the detection of dozens of illnesses. They have raised doubts about the motives of her romantic partner, the integrity of the *New York Times* and even their own portrayal of Ms Holmes. You can’t see everything. So how can you trust anything?

Americans absorbed this lesson long ago. They might not all have read Michel Foucault on how power shapes truth, or Jean Baudrillard on how modern media erase the boundaries between authenticity and artifice. (Lexington hasn’t got around to it, either.) But they have watched plenty of reality television and become sophisticated enough about the plasticity of truth to have elected their first post-modern president, not once but twice. Or is it three times? Narratives differ.

It is paradoxical, though characteristic of the self-sabotaging academy, that an intellectual movement meant to subvert traditional power structures has helped a right-wing American politician magnify the power of the presidency. But from his days lying about the number of storeys in his buildings to his success as a reality-television star to his years in the Oval Office, Donald Trump has exhibited an intuitive mastery of this corrosive post-Enlightenment realism about reality. His basic rule of business and politics has been to trust nothing and no one. “I’m a non-trusting person,” he told CBS News back in 1990.

Mr Trump has succeeded partly by relying on radical scepticism of facts proclaimed not just by other politicians but by the

news media, the pollsters, the courts and the scientists. He knows that reflexive cynicism is trailed everywhere by its idiot twin, gaping gullibility about conspiracy theories with only the flimsiest connection to any fact. Election deniers, climate-change deniers and anti-vaxxers are flourishing in America’s years of epistemic crisis. Even the flat-earthers are having a bit of a moment, if the polls are to be believed, which of course they’re not.

To be fair, Ms Holmes, for one, has reason to be annoyed, or jaded, about the nature of narrative, at least as it is constructed by the news media. She was widely celebrated, including in rigorously fact-checked publications, before she was widely demonised. The head-snapping reversal came after reporting by the *Wall Street Journal* revealed that the seemingly miraculous “Edison” device developed by Theranos was not able to perform the many tests Ms Holmes claimed, and she was eventually found guilty.

It is on this point that Mr Fielder’s documentary is a bit too clever for anyone’s good, except perhaps Ms Holmes’s. She comes across as a nice lady, if a bit strange. One would need a heart of stone not to feel sorry for her and her family as she leaves her toddler and infant behind with her partner, Billy Evans, to begin serving more than 11 years for bilking the likes of Rupert Murdoch and the heirs to the Walmart fortune. Mr Fielder asks penetrating questions, and he is a master of the awkward silence. But Ms Holmes proves his equal, meeting his stillness with stillness and his hooded stare with wide, seemingly guileless blue eyes that at times mist with tears. She believes she has never told a lie, she says, and (unlike the president) she is a trusting person who is “always being real”. Mr Fielder lingers over the possibility that her “fraud” hinged on an epic miscommunication. When she claimed the Edison device “can” work, she meant it *could* work, once science caught up with it. She did not intend to deceive anyone. “She just thinks differently,” explains Mr Evans. Ms Holmes laments that “the world believes in a reality about me that isn’t true.”

Hyperreality bites

The post-modernists are right. Power does shape the perception of truth and narrative can mould reality. Ms Holmes’s ascent demonstrated that. And, as Mr Trump has claimed, even the courts can be rigged, and juries can deliver mistaken verdicts. Yet the jury in Ms Holmes’s case does not seem to have decided blithely.

After a trial of almost four months, the jury acquitted her on four counts and deadlocked on three, while convicting her on four. It sifted through a mountain of witness testimony and documentary evidence, including that Ms Holmes, as she admitted, personally affixed the logos of pharmaceutical companies to favourable reports on Edison, even though they had reached no such conclusions. To gesture, on the basis of word games, at the idea the jury might have got it wrong is not, as some movie critics have put it, a “bold, perhaps impossible, quest for truth” or a “battle for the essence of truth”. It is, instead, a shrug at the impossibility of apprehending the truth—an act not of idealistic struggle but of surrender, if not nihilism.

Maybe it is silly to get wound up about this. The movie is thought-provoking and funny. But America is about to have another election. If it does not go his way Mr Trump can be expected to reject the results, and maybe even to try to reverse them. He has done that before. Will Americans follow the model of Mr Fielder and so many others, and throw up their hands, uncertain of what the facts truly are? The world may be about to find out. ■

The Americas



Brazil's election

The final countdown

MONTE SIÃO

Can Lula, now the underdog, pull off one last trick?

THE PRESIDENTIAL run-off on October 25th is shaping up to be the tightest since Brazil returned to democracy in 1985. The election pits Luiz Inácio Lula da Silva, the 80-year-old left-wing incumbent, against Flávio Bolsonaro, the 45-year-old son of Jair, a former president. No candidate who lost the first round has ever gone on to win the second. But though Lula, as the incumbent is known, trailed Flávio in the first vote on October 4th (Lula got 45%; his rival 47%), he is refusing to go down without a fight. Can he pull off an upset?

Since his loss in the first round, Lula has taken dramatic action. Once a technophobe who declined even to use a mobile phone, he has lately begun posting self-videos on Instagram. He has come out in support of lowering the age of criminal responsibility for serious crimes, a policy that was previously anathema to the left. And he has pushed Congress to pass a

wildly popular measure that will reduce the work week from 44 hours to 40 hours without pay cuts. His campaign has rallied hundreds of thousands of supporters in marches across big cities, replete with celebrity performances.

He is also making big spending pledges. He has promised to forgive federal tax debts racked up by sole traders such as barbers, manicurists or plumbers, and to hand out \$1,000 to 1m of them. He has pledged to make public transport free at weekends. This comes on top of a recent increase in the government's flagship cash transfer to poor families, the abolition of income taxes for lower-middle-class Bra-

zilians and a decision to outlaw gambling firms (who were paying lots in tax). These new measures all combined could cost the government a total of \$58bn by the end of 2027 (over 2% of GDP), according to the Independent Fiscal Institution, a research outfit linked to Brazil's Senate.

The promises are having an effect. Lula is making up ground on Mr Bolsonaro, particularly among women. Some of the latest polls show them neck and neck in the race (with the caveat that pollsters in Brazil have repeatedly failed to fully capture right-wing sentiment, including before the first round on October 4th, when the polls had Lula ahead). In the week after October 10th betting firms almost doubled Lula's odds of victory, though they still put him behind his rival.

Mr Bolsonaro is hitting back. He ended up voting in favour of the shorter work week, having previously disparaged it. In a presidential debate on October 18th he alleged that crime had exploded during Lula's third term (in fact it has fallen). Of the four right-wing candidates knocked out in the first round, who between them received 8% of votes, three have backed Mr Bolsonaro. Despite the narrowing polls, Le Millénaire, an election forecaster based in Paris, puts his odds of victory at 82%.

A trip to Minas Gerais, the country's ►►

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▶ second-most populous state, shows the hill Lula has to climb. It is a microcosm of Brazil: its arid north borders the country's poor north-east, Lula's heartland. To its south and west, agribusiness and industry reign supreme and voters lean right. No president has ever won without taking Minas. Though Lula carried the state in 2022, he lost it by five percentage points to Mr Bolsonaro on October 4th.

In Monte Sião, a town of 25,000 people, some 2,000 tiny firms churn out knitwear from the ground floors of the owners' houses. Residents complain about the rising cost of living. In the backroom of a small firm, five seamstresses are adding the finishing touches to dresses. "We pay so much in taxes, taxes, taxes," complains one. "We have no money left over at the end of the month—we earn just to survive." Her colleague chimes in: "It's called the Workers' Party, but the worker gets nothing!" Their boss blames crushing interest rates for pushing up his debt.

Fatigue with Lula's Workers' Party (PT), which has been in power for 18 of the past 24 years, is common in these parts. In Poços de Caldas, a town nearby that is known for its thermal baths and abundant deposits of rare earths, voters are disheartened. "Lula said he would give everyone *picanha* (rump steak), but today even eggs cost a lot," says a 45-year-old bricklayer, referring to a promise Lula made on the campaign trail in 2022, that he would make all Brazilians rich enough to eat top cuts of beef. After voting for Lula in the past, he says he will cast a blank vote. In a down-at-heel suburb, Carlos Moisés, a 64-year-old barber, is sweeping the floor of his shop. A lifelong PT voter, he will vote for Flávio, explaining that he is drowning in taxes. "I know the Bolsonaro family isn't all that great. But we got tired, you understand?"

The PT was built on support from trade

unionists, Catholic priests and academics. It has struggled to adapt to a more evangelical Brazil, with workers who are increasingly self-employed. Since 2010 the number of registered sole traders has rocketed from under 1m to 15m. That sector now accounts for almost a fifth of formal jobs. These people commonly earn too much to receive government support but also too little to live comfortably. For years, PT mandarins derided them as "CEOs of one-person companies". Lula's pledge to forgive some of their debts is a late attempt to win them over.

Dotted around the green landscape are Pentecostal temples, some preaching a doctrine celebrating wealth. "The growth of Pentecostalism has helped spread conservative values in poorer neighbourhoods," says Lucas Pavanato, a 28-year-old in São Paulo who has just won a seat in Congress for Mr Bolsonaro's party. "Left-wing ideology puts all the blame on social structures, whereas religion places respon-

sibility on the individual to improve their life." Among evangelicals, Lula trails Mr Bolsonaro by 33 percentage points.

Mr Pavanato's success demonstrates the right's social-media prowess. In the legislative election held on October 4th he got the second-largest number of votes in the country—just behind Nikolas Ferreira, an ardent evangelical Christian and social-media whizz who has over 30m followers. Brazilians use social media more heavily than people almost anywhere else, and many get their news from such platforms.

Before the first round of the presidential ballot Mr Bolsonaro's campaign spent at least \$2m boosting his content online. Lula's campaign spent barely \$500,000. It handed out lots of stickers with his face on them. Lately his team have been accusing social-media platforms of improperly limiting their campaign-messages' reach. With only days of campaigning remaining, Lula's team must fervently hope that the old ways may still prove to be the best. ■

Israel and Latin America

Bibi's buddies abroad

BOGOTÁ AND BUENOS AIRES

New right-wing leaders are rushing to upgrade ties with Israel

"SOMETHING REMARKABLE is happening in Latin America", grinned Binyamin Netanyahu, Israel's embattled prime minister, on October 14th. "It's all coming back! The great friendship." He was speaking following the opening of Colombia's new embassy in Jerusalem. Colombia has become the fourth—and so far the most populous—Latin American country to recognise the holy city as Israel's capital. It is unlikely to be the last.

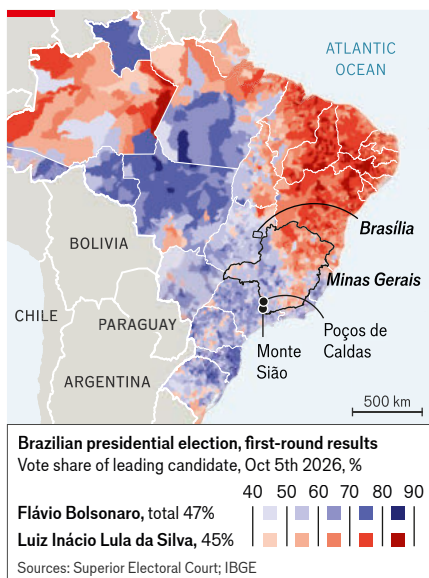
Israel has grown more isolated as a result of the war in Gaza. Yet conservative leaders in Latin America—many of them newly elected—are dramatically stepping up ties. Javier Milei, Argentina's president, is the keenest. Earlier this year he told *The Economist* he thought Mr Netanyahu was a "superstar". He himself has claimed, oddly, to be the "most Zionist president in the world". In April Mr Milei announced the "Isaac Accords", a vague framework for closer engagement between Israel and the region. A new direct flight between Buenos Aires and Tel Aviv launches next month.

Flávio Bolsonaro, the frontrunner in Brazil's presidential election, has vowed to relocate his country's embassy from Tel Aviv to Jerusalem if he wins on October 25th. He expressed his "full support" for Israeli settlers during a recent visit to the West Bank; both he and Mr Milei have

prayed before the Western Wall. As well as moving its embassy, Colombia in August became the only country other than the United States to say it supported Israel's claim to the Golan Heights. "We have never paid so much attention to our relationship with Israel," says Sandra Borda of the University of the Andes in Bogotá.

Rodrigo Paz in Bolivia, José Antonio Kast in Chile and Nasry Asfura in Honduras have all bolstered diplomatic ties that their predecessors had downgraded in response to the bloodshed in Gaza. Delcy Rodríguez, the interim president of Venezuela, has softened the *chavista* regime's longstanding hostility towards Israel. After big earthquakes near Caracas in June she accepted Israel's offer to send rescue teams and resumed consular ties. "Latin America is becoming a blue continent," says Marcos Peckel of the Confederation of Jewish Communities in Colombia, referring to Israel's blue-and-white flag.

Some of the region's leaders are motivated by strong personal convictions. Mr Milei is known to study the Torah with a rabbi. When *The Economist* visited his office in August, a Hebrew text sat on his desk. In a speech to Israel's parliament in 2025, he vowed to "defend Western culture". Yet political calculations are plainly central, too. Moving closer to Israel is one



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**The
Economist**

► way for the new right in Latin America to curry favour with America's Republican Party, and with Donald Trump.

The political costs are relatively low, says Christopher Sabatini of Chatham House, a think-tank in London. A survey by Pew, a pollster, finds that a little over half of Argentines, Brazilians, Colombians and Peruvians have an unfavourable view of Israel—much lower than the 69% reported in Britain and 78% in Spain. In most of Latin America, questions related to Israel and Palestine matter far less to voters than fighting crime and boosting the economy.

The region also has a swift-growing constituency that encourages outspoken support for Israel: evangelical Christians. Many believe the Jewish return to Israel fulfils biblical prophecy. Born-again Christians have been effective in getting right-wing leaders into power. Before Colombia's election evangelical voters held prayer vigils for Abelardo de la Espriella, the eventual winner, who was once an atheist but is now a fervent Catholic. Evangelicals also mobilised behind Mr Bolsonaro in the first round of Brazil's election.

Many of the region's leaders took office promising to take a tough line on drug gangs. Governments are counting on weapons and advice from Israel to give their plans a boost. In 2022 Ecuador, which has a murder rate three times the Latin American average, said it would spend around \$65m buying Israeli armoured vehicles. The violence in Ecuador has its roots in neighbouring Colombia, where Mr de la Espriella has recently been bombing armed groups. But the armed forces need Israeli intelligence and drone technology to act effectively, says General Alberto José Mejía, who led Colombia's military services in 2015-18.

In 2024 Gustavo Petro, the president at the time, severed ties with Israel and halted purchases of arms and other equipment that Colombia's army had long relied on. The country's weapons stocks were depleted, says General Mejía. Colombia's various rebel groups now rally more than 28,000 fighters, almost double the figure when Mr Petro took office in 2022. "The Israeli defence complex will have a field day with this government," says a Colombian intelligence expert.

Will the love-in with Israel endure? America's midterms, in November, are relevant. If Republicans come out wounded, leaders in Latin America may grow a bit less inclined to follow Mr Trump's lead. In Chile, a friendlier policy towards Israel has prompted a backlash (it has a large Palestinian community). Supporters of Colombia's formerly pro-Palestinian policies are also aghast. Israel's own election, on October 27th, adds uncertainty. But for now, at least, Latin America and Israel are enjoying their tightest bond in years. ■

Religion in the Caribbean

Herbal remedies

MONTEGO BAY

Rastafarians in Jamaica want more rights

SISTER NANNY is easy to spot. Sporting a red, gold and green dress—with a matching headpiece—the Rastafari campaigner is outlining an idea she thinks will help marginalised members of her faith. Jamaica takes advantage of the world's interest in Rastas to "attract visitors" to the country, she notes. Yet those same people continue to suffer stigma. She thinks the Jamaican government should share proceeds with the community, whenever it profits from their culture.

Dreadlocks, cannabis, reggae: think of Jamaica and aspects of Rastafari culture commonly leap to mind. On the island, however, the religious movement has often been maligned. Rastafari beliefs originated in poor Jamaican neighbourhoods in the 1930s. They revolve around a single God, Jah, said to reside within each person. Haile Selassie I, the Ethiopian emperor crowned in 1930, is seen by some as the second coming of Christ (Selassie politely discouraged the idea).

From the beginning, authorities took a tough line. Many Rastafari were arrested for possessing cannabis, which they view as a sacrament. Schools and prisons forced them to shave their dreadlocks, which violates a vow. Violence erupted in 1963, following an altercation at a petrol station in the city of Montego Bay. Security forces detained Rastas all across Jamaica; some were killed.

In 2017 the Jamaican government formally apologised for the "Coral Gardens incident", as it became known. This year it has gone further, formally handing the deeds to land in Montego Bay to a campaign group that Sister Nanny helps organise, as restitution. The land will be used for a Rastafari care home.

The move fits into a broader trend of pro-Rastafari policymaking in the Caribbean. In 2015 Jamaica somewhat liberalised its drug laws, explicitly permitting Rastas to grow and use cannabis for religious purposes. St Vincent & the Grenadines passed a similar rule in 2018; Barbados the following year. When Antigua & Barbuda joined them in 2023, the prime minister, Gaston Browne, acknowledged that his country had once tried to "destroy" the faith. This year St Kitts & Nevis formally recognised Rastafarianism as a religion, which grants it stronger legal protections.

Rastafari in Jamaica say discrimination has decreased, but not disappeared. "The police still harass Rastafari...for having herb," says Ras Iyah V, chairman of the Westmoreland Hemp and Ganja Farmers' Association. The movement is pleased with the progress, but it is pushing for more. Sister Nanny's group has begun advocating for Rastas to get intellectual property rights that might protect "the colours, the language, the food...Anyone who wants to appropriate our culture, then they should pay". The promise is that funds raised in this way would be used to build schools and more care homes.

Talks with Jamaica's government continue. A lack of unity hampers the fight. In 2023 several distinct groups formed Rastafari Mansions and Organisations, an umbrella body, to help co-ordinate advocacy. Coherence remains a challenge, says Sister Nanny. "There is no one voice yet." ■



Making progress

Asia



Indonesia

Unpopular populist

JAKARTA

How will Prabowo Subianto respond to a sharp drop in voter approval?

HAFIDZ HERNANDA was riding down a quiet street in Jakarta, Indonesia's capital, close to midnight on October 4th when another motorcyclist kicked his bike, knocking him to the ground. Two more men joined the attack as the assailant beat Mr Hafidz and threatened to kill him. Afterwards they took his phone and bag, robbery seemingly an afterthought. The police say they are investigating, but no suspects have been identified.

The assault was notable because Mr Hafidz has become one of the highest-profile organisers against President Prabowo Subianto, leading two protests by students against his policies earlier this year. On the night of the assault he was riding back to his home near the University of Indonesia from a meeting with other student activists at a roadside eatery. There, they had been planning a demonstration against Mr Prabowo on October 20th, the second anniversary of his inauguration.

It was a protest that the administration desperately sought to prevent from going ahead. In the days after the attack on Mr Hafidz, army and police officers pleaded with students to stay at home. One activist says he was offered a bribe if he could persuade students not to hit the streets. On the morning of the anniversary, police said they had deployed 9,500 officers to keep demonstrators in line. If that was intended to intimidate them, it seems to have worked. Only a few hundred hardy students gathered in central Jakarta to demand that Mr Prabowo do something

about high prices and what they call a long list of failures of his administration.

Mr Prabowo, whose father-in-law, the dictator Suharto, lost power amid mass demonstrations in 1998, has long had a fear of the street. That anxiety was reinforced in August 2025 when protests by students and workers against corruption and police brutality led to days of unrest and calls for broader political reforms. At the time, Mr Prabowo called a press conference where he gave in to some of their demands. He later watered down his promises after the protests died down.

But that was when Mr Prabowo still enjoyed unprecedented popularity, with 81% of those surveyed in November 2025 telling pollsters that they approved of the job he was doing. Since then, his approval ratings have seen record declines. In a survey released on October 16th, only 45% said they were satisfied with his performance. That figure would be the envy of many Western leaders, but in Indonesia—where, for cultural reasons, many respondents are shy about being too damning in responses to pollsters—it is near historic lows.

Those who disapprove of Mr Prabowo's performance mostly cite higher prices for necessities, not his heavy-handed approach to politics, as the reason for their dissatisfaction. America's war against Iran has driven up the cost of importing fuel, ►►

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▶ while a strong El Niño is driving agricultural yields down. The prices of staples have soared. Bird's-eye chillies, which give Indonesian food its kick, have risen by 76.5% compared with a year ago. The prices of chickens, eggs and rice are all up, too. But the drivers of inflation, the war and the weather, are out of Mr Prabowo's control.

That leaves the president in a bind. He could double down on the expensive populist programmes that have become his hallmark in office, like his "free nutritious meals" scheme and a network of 80,000 state-run village co-operatives. The former had been curtailed this year so as to fund expensive petrol subsidies popular with voters. Mr Prabowo might try to win back his former supporters by ramping the free meals programme up again. But surveys also suggest that Mr Prabowo's signature programmes are less popular than before.

New handouts may therefore follow. On October 13th the president's influential younger brother, Hashim Djojohadikusumo, proposed that every citizen be given a free mobile phone. Linked to a free bank account, the phones would bring Indonesia's unbanked into the formal financial system, he argued. It would also, no doubt, endear Mr Prabowo to many voters.

Another possibility is that a less popular Mr Prabowo will crack down on dissent and political opposition. There is no clear evidence that Mr Hafidz's assault was directed by his administration, but that has not stopped activists from implying that it was. The possibility is hard to dismiss, given Mr Prabowo's past. As a special-forces commander under Suharto, Mr Prabowo kidnapped dozens of student activists in 1997 and 1998. He admits doing so and says he returned them all unharmed. But some were never heard from again.

The street is not the only source of opposition to the president. Foreign investors and local tycoons are turning against him, too. The main stock-market index sank by nearly 12% on October 16th and is down by 40% so far this year, making it the world's worst performer—and indeed, in the two

years since his inauguration (see Business). Foreign capital is fleeing what was once a promising emerging market. Investors blame regulatory uncertainty and a lack of transparency. Local tycoons, particularly those who are ethnically Chinese, say they fear shakedowns by Mr Prabowo's lieutenants. They have been stashing money abroad rather than investing it at home.

The turmoil has united political-party bosses quietly eyeing moves against the president. The most concerning for Mr Prabowo must be the signs of a rift with his predecessor, Joko Widodo. The two were once rivals but teamed up in the 2024 election, when Gibran Rakabuming Raka, Mr Widodo's son, joined Mr Prabowo's presi-

dential ticket as his running mate. That gave them a landslide victory. A falling-out between the two would make any prospect of winning a second term at the next election, in 2029, a fantasy. Kevin O'Rourke of "Reformasi Weekly", a newsletter, says that if Mr Prabowo's poll numbers remain so low, he may not risk facing the voters.

Instead, he could amend the constitution to end direct presidential elections. Parliament would select the president and vice-president, as was the case until 2004, letting Mr Prabowo avoid a referendum on his performance and win a second term through backdoor deals. But to do so would surely spark the kind of street protests he seems so desperate to avoid. ■

The danger of stray and often rabid dogs

A small country shows the way

JOMOTSHANGKHA

Bhutan has tackled a canine scourge in a humane way

CROSS FROM India into Bhutan at Jomotshangkha and little seems to change. The same hills stretch across the border, roadside shops sell mostly identical wares and similar-looking dogs laze on the streets. Yet the observant visitor may notice one difference: the dogs on Bhutan's side have notched ears.

Those marks signify sterilisation and vaccination against rabies. The tiny Himalayan kingdom has sterilised its entire stray-dog population. With mass vaccination and free treatment for people who've been bitten, this has helped eliminate human rabies carried by dogs, making Bhutan just one of three countries to do so. The disease, a global scourge, is especially deadly in South Asia. In India rabies kills some 5,700 people a year, by one estimate. Bhutan's last human death from it was in 2023.

Like its much bigger neighbours, Bhutan has long grappled with stray mutts. In the 1980s marksmen used dart-guns from the UN's World Health Organisation to shoot dogs in public. In some places dogs were fed raw meat laced with strychnine. The campaign appalled Bhutan's people, most of whom are Buddhist. Nor did it work: dog numbers kept rising.

From 2009 the government switched to a gentler approach. Dogs were caught, neutered, vaccinated and released. But implementation was patchy. Over nine years some 92,000 animals were treated, but vaccination rates never got close to the 70% needed to break transmission. It took a royal decree to give the campaign

bite as well as bark. In 2021 the king ordered "a professional, humane and compassionate sterilisation of the entire free-roaming dog population". Some 9,000 members of De-suung, a national volunteer corps, helped count the dogs, keep records and stir up communities. In under two years vaccinations hit 90%.

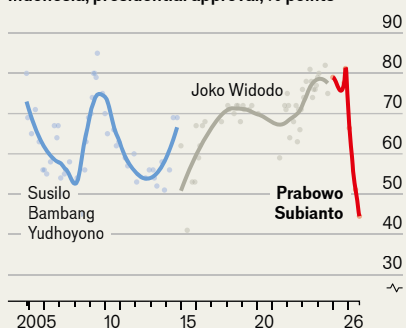
Other Asian countries should take note. The scale of the problem in places like Bangladesh and India, which host millions of stray dogs, many of them rabid, may seem daunting. But local governments could follow Bhutan's example, pooling resources and tackling the problem one area at a time.



On the naughty step

Plunging Prabowo

Indonesia, presidential approval, % points



Sources: Indikator; SMRC

Japan

Regrets, she's got a few

TOKYO

America's attack on the International Criminal Court is a headache for Japan

AKANE TOMOKO was on holiday back home in Japan when she learned that Russia wanted to arrest her. At the time, in 2023, Ms Akane was a judge at the International Criminal Court (ICC), which had recently issued an arrest warrant for Vladimir Putin. Russia was retaliating. But she wasn't too fussed, she recalled in a book last year, after she had become the court's president. What really worried her was a more existential danger: that sanctions might be imposed by America, which, like Russia, has never recognised the ICC's jurisdiction. Several judges had already been put under American sanctions earlier that year. The worst-case scenario would be sanctions on the court itself, she wrote. "The ICC would essentially be shut down."

That scenario is now coming true. On October 9th Marco Rubio, America's secretary of state, announced the latest stage of a campaign to "dismantle the ICC, brick by brick". The Trump administration says the ICC is threatening American sovereignty because it claims the power to investigate and prosecute American citizens for war crimes or crimes against humanity committed on ICC member states' territory. The sanctions freeze ICC assets in America and block American firms and banks from engaging with the court. They will take effect after 180 days, a period during which Mr Rubio expects member states to rein in the court.

This puts Japan in a quandary. It is the largest funder of the ICC, contributing 15% of its budget. And for decades Japan has made the international rule of law a pillar of its foreign policy. But Japan also depends on America for its security; so the government was muted in its initial response when Ms Akane herself was put under sanction in August. Takaichi Sanae, the prime minister, said the sanctions were *taihen zannen*, "very regrettable"; but she pointedly did not call for their withdrawal.

Her careful wording sparked a backlash. Nakatani Gen, a former defence minister from Ms Takaichi's party who now heads a cross-party group focused on human rights, accused her of being "docile and not saying what needs to be said at a crucial time". In Nagoya, where Ms Akane taught law in 2005-08, her former students have gathered more than 174,000 signatures in her support. "It's not idealism for Japan, it's security," says Shamoto Yosuke, one of them. "Japan cannot rely on military

power alone to protect itself. That is why we need an international order based on rules, not just power."

Since then Ms Takaichi has been bolder, calling the sanctions incompatible with Japanese policy. She raised the issue with Mr Trump in New York in September. After the latest sanctions, Japan signed a joint statement in support of the court with other ICC members, including all G7 countries bar America. Some suggest that Japan could discuss ICC reform over matters of jurisdiction to appease Mr Trump. But talk is unlikely to change his administration's position. A better use of the 180 days, suggests Christopher Lamont of Tokyo International University, would be to plan how to keep the court running: by setting up funding that isn't exposed to the American financial system, for instance.

This, though, could anger America further. Japan does not want to choose between two components of its security, one based on international law and the other on American protection. Regrettably, it is being pushed to do so. ■

India and China

The road to deterrence

TAWANG AND ZEMITHANG

India is investing heavily along its border with China

JUST 10KM from India's north-eastern border with China, the village of Zemithang lies in the heart of territory claimed by the Chinese. Everyday life feels unmistakably Indian. Locals chat in Hindi, listen to Bollywood songs and fly Indian flags. But occasionally there is an unwanted Chinese presence. "My phone keeps changing to Beijing time [two and a half hours ahead], because I lose my Indian network and pick up the Chinese one," says a local official. His complaint captures the challenge facing India as it tries to transform its remote frontier, and match a massive infrastructure roll-out on the other side.

India is pouring concrete and money into Zemithang and other parts of Arunachal Pradesh (AP) to strengthen its hold over the Himalayan state. Home to fewer than 2m people, it is claimed by China, which calls it Zangnan, or southern Tibet. The state was also the main theatre of the only war between the two countries. In 1962 Chinese soldiers descended through the mountains, overran Indian forces and occupied parts of it. They eventually withdrew, but the defeat has ensured that relations have been edgy ever since.

Today the frontier is far calmer. The two armies face each other across the "line

of actual control", a disputed border that runs through spectacular mountains and valleys (see map). Barring a few scuffles, there has been no clash in AP since 1975. Even during hand-to-hand fighting in 2020 between Indian and Chinese troops in Galwan, 1,500km to the west, the border in AP remained quiet. But this is an ugly stability, says Ajai Shukla, a security analyst based in Delhi. The road to the border on the Indian side is lined with military camps: an estimated 90,000-120,000 troops are deployed in the region. In August local political groups alleged there had been Chinese intrusions near Taksing, in eastern AP, though India's government dismissed the reports as rumours.

The fiercest contest is over infrastructure. For decades Indian officials eschewed building roads in AP, fearing it would give an invading Chinese army an easier route south. That is now considered a mistake: poor connectivity hindered India's ability to supply its own troops and kept its citizens isolated. Meanwhile China built an extensive network of roads on its side, as well as hundreds of "dual-use" villages that combine civilian settlements with military infrastructure.

India is rushing to make amends. "Until the clashes in Galwan, India assumed that the relationship with China would improve in a linear fashion. That incident was a real wake-up call," says Jabin Jacob of Shiv Nadar University. These days India regards connectivity as essential to deterrence. Much of the work is led by the defence ministry's road-building arm, which has constructed hundreds of kilometres of roads in the region, including the Sela Tunnel, which keeps Tawang, the biggest town in the area, accessible even during winter.

The building drive extends far beyond roads. AP's rivers have huge hydropower potential. To harness it, India is planning several dams, including its biggest-ever on the Upper Siang river. Securing the border also involves breathing more life into the settlements near it. Indian officials have become increasingly alarmed by satellite



► images revealing the rapid expansion of Chinese border villages. In 2023 the Indian government launched the Vibrant Villages Programme. Around 27bn rupees (\$286m) has been set aside for projects in the state, 6% of the state's GDP.

The aim is to stem migration from the region, draw people in, and improve administration. Much of the focus is on construction. But the army is also helping to turn the area into a tourist attraction (for Indians only), offering visitors access to

border posts and history lessons on the 1962 war. At Bum La pass, at around 4,600 metres, soldiers accompany tourist groups right up to the frontier and lead chants of “*Bharat Mata ki Jai*” (“Victory to Mother India”) while facing the Chinese side.

All this is welcomed. The state has always been one of India's poorer and more isolated corners, but in 2024-25 (the latest year for which data are available) its economy grew by 10%, the third-fastest rate in the country. Still, residents crave more de-

velopment and of better quality. Locals fret that funding takes too long to arrive and gets tangled in bureaucracy.

Such complaints reflect the chasm between China and India that shapes their rivalry. China enjoys greater economic and military resources and also the advantage of unfettered state capacity. It is said to have forcibly relocated people to border villages. The Indians, meanwhile, must contend with local concerns—such as opposition to the construction of dams. ■

ASHOKA

Chipping away

Indians' rights have been restricted for decades; but messing with elections is a step too far

THE CONSTITUTION of India is filled with all sorts of noble ideas. The preamble promises every citizen justice, liberty and equality, to say nothing of dignity. The body lays out a dizzying array of institutions designed to secure those rights. And then, almost as soon as the ink had dried on the document, India's new leaders started having second thoughts. The first amendment to the constitution imposed “reasonable restrictions” on the right to free speech. The 24th made explicit that Parliament can alter even the parts about fundamental rights. Things reached a nadir with the 42nd amendment, passed in 1976 during a state of emergency imposed by Indira Gandhi, when, not satisfied with further curtailing Indians' rights, Parliament also created something called “fundamental duties”.

The Emergency eventually ended. But the chipping away of rights did not. Successive governments have knee-capped or subverted independent institutions. Narendra Modi has continued this cross-party tradition since coming to power in 2014. Under his rule investigative agencies are seen by many as the enforcement arm of his Bharatiya Janata Party (BJP), Parliament has frequently resembled a rubber stamp, and the courts have become curiously uninterested in upholding individual liberty. Indians, for the most part, have turned a blind eye. For the vast majority, there are more pressing concerns.

Yet there is one right Indians take with deadly seriousness. That is the right to vote. Every five years they march to the polls to express approval or frustration in vast elections that are widely considered free and fair. In the interim politicians rule with imperiousness, pretend that voters don't exist and help

themselves to public money. Fine. So long as citizens believe they have the power to punish their rulers come election day, they will put up with a lot. This is the essence of India's social contract.

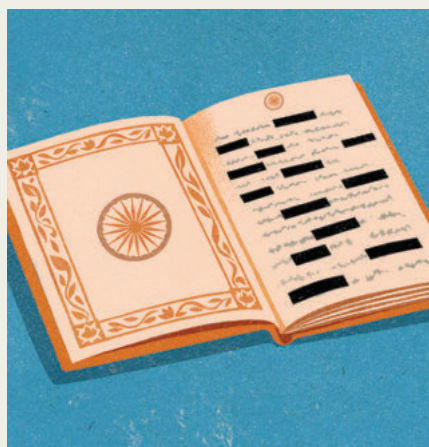
The sense that it is being violated is why the latest protests against Mr Modi's government have touched a nerve. Some 130m of the country's nearly 1bn registered voters have been struck off electoral lists in a “special intensive revision” that the government says is necessary to “purify” the rolls of duplicates and the dead. Critics say it has disenfranchised millions of citizens, perhaps tens of millions. Both of these things may well be true. Last month the *Indian Express*, a newspaper, revealed that two of the three commissioners of the supposedly independent Election Commission of India had objected at least 14 times to decisions taken under its chief, Gyanesh Kumar. The commission denied this. But protesters have spent much of October on the streets demanding his resignation, painting him as a BJP stooge.

Well before the special revision the BJP had in state after state used sleazy politi-

cal tactics and its control of institutions to break up rival parties and lure away their lawmakers. Voters accepted that, just as they once accepted armed men routinely capturing polling booths and stuffing ballots in the more lawless parts of the country. And just as they still accept rampant vote-buying, both legal (cash handouts from the state) and illegal (cash handouts from candidates). All of this is seen as part of the game. Under dispute now is the much more fundamental question of whether the game itself is fixed.

India's political class should consider itself lucky. In next-door China, the Communist Party has to do something much more difficult than winning elections. China's social contract requires the state to consistently raise living standards, the quality of life and national power in exchange for which citizens keep their noses out of politics. All Indian politicians have to do is to feign interest in their constituents once every five years. Yet instead of accepting this sweetheart deal, Mr Modi's government is doubling down by suppressing protests that are attempting to enforce it.

Anyone who has ever set foot in an Indian kitchen will be familiar with the pressure cooker, a terrifying contraption that lets out an almighty shriek to vent its accumulated steam at predictable intervals, not unlike an election cycle. If that usual outlet is blocked, however, one of two things can happen. A safety valve breaks, letting loose a paroxysm of scalding steam everywhere. Or the pressure grows—and grows and grows—until there is a catastrophic structural failure. It is to prevent precisely such an explosion that India's founders added safety valves to the constitution. To block them all is not just dangerous. It is foolish.



China



Academic stress

Tightening belts

China's universities are rich. But they're getting squeezed

IN ITS COMPETITION with China, America sometimes commits self-sabotage. Under Donald Trump, cuts in federal support for universities have been particularly damaging. To convey their anguish, some American scientists have drawn attention to the advantage that their country's strategic rival may gain from these retrenchments. China has been handed the future "on a silver platter", complained one academic from Harvard University last year.

In China there is plenty of funding for academics who are engaged in cutting-edge research in fields favoured by the Communist Party such as artificial intelligence and robotics. But the Harvard academic may be surprised to learn that on many campuses, the mood among staff is sullen. Eager though the party is to promote scientific endeavour, it is becoming more selective about who gets the state's cash. In April the education ministry said that it had revoked 12,200 degree pro-

grammes in recent years, mainly in soft subjects such as "business management", replacing many with majors in AI and other sciences that are the party's priorities.

But departments involved in subjects such as physics and chemistry are also feeling the pinch. This decade's spending by central and local governments on science and technology has grown annually at just 3.5%, slumping from 10% in the late 2010s. Such outlays cover everything from museums to social sciences, but government spending on natural-science departments is also growing more slowly. Some university budgets are being cut. In Sep-

tember Peking University in Beijing was one of several to issue new orders to "practise thrift and tighten belts". At some institutions researchers' pay and perks are being reduced.

Since the 1990s China's universities have expanded rapidly and the living conditions of academic staff have become far more comfortable. The international stature of the country's universities has also soared. In 2017 just two of them were among the world's top 100, according to *Times Higher Education*, a British magazine. This year eight were, including Tsinghua University and Peking University which ranked 11th and 13th globally—the highest of any in Asia.

To Chinese academics who have long been used to good times, for free mags check softarchive.is the belt-tightening has come as a painful shock. Even some of the country's 75 elite universities, which are funded by the central government, are being squeezed. Their median budget grew 6.8% this year, but one in five suffered cuts. Some have more than halved the number and value of scholarships for postgraduate programmes.

China's weaker economy is in part to blame. Other than top-tier ones, many universities depend heavily on financing from local governments whose budgets are being crimped by a prolonged slump in the property market. Local authorities are re- ▶▶

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► sponsible for 95% of the country's 2,900 universities. Documents reviewed by *The Economist* show that even in Shenzhen and Hangzhou, both big hubs of party-backed tech, universities have had their budgets cut by more than 5% this year.

The economy is still growing at 4.5%. But it cannot create enough new jobs to absorb record numbers of graduates: youth unemployment is 19%. So more are staying on campus. The annual intake of doctoral students has nearly doubled since 2019 to 200,000. Those who remain in academia have to compete for shrinking shares of government money. Post-doctoral work has become insecure and, as one academic puts it, requirements for promotion are turning "inhumane".

Academics often need a grant to move up the ladder. Since 2021 applications to the main grant programme of the National Natural Science Foundation of China—the principal source of central-government funding for sciences—have risen by 80% to 200,000. But the amount disbursed has climbed by only 3%. Success rates for applications fell from 22% in 2013 to 12% last year. This year the foundation has boosted handouts to young researchers by 50%—in part, maybe, to assuage their discontent.

Restoring happiness will be difficult. Increasingly, universities are adopting Western styles of employment, with academics often having to labour for years before being granted a permanent job, says Qiang Zha of York University. Some complain that, because of tighter budgets, universities are hiring junior staff to bolster research with no intention of giving them a permanent place. Getting a job or promotion in academia is now such a struggle that many quit. Shenzhen Middle School employs more than 100 staff with PhDs.

As the party's main mouthpiece, *People's Daily*, pointed out last month, China's universities are not "running out of money". In aggregate, at least, they are getting more: spending on university research rose by 11% last year, to 341bn yuan (\$47bn), according to official figures. But companies, including non-state ones, are providing a growing share of that cash. In 2024, the most recent year for which data exist, they supplied half of new funding for research at universities. But they have little interest in supporting scholarship that is unlikely to nurture the talent and technologies that will help them commercially. And they prefer well-funded big-name universities.

There may be some benefit in tight-fistedness. When China's universities were rapidly expanding, promotion was often linked to the quantity of material published rather than quality, says Yu Xie of Princeton, who also runs a centre at Peking University. Now money-conscious universities have to be more discerning and produce more breakthroughs.

But, as one academic notes, the pressure to publish papers creates an incentive for fraud. "Paper mills" advertise their services on popular e-commerce sites such as Taobao. Some researchers have been caught paying bribes to get their work published. Online sleuths (including drop-outs from doctoral study) have been ferreting out academic malfeasance in order to topple professors from their posts. A few provincial governments are investigating a practice whereby academics pay companies to fund their research to meet grant quotas for promotion. In a small government survey, one-fifth of respondents admitted to the practice.

Junior academics mostly grind away at their research with poor prospects for long-term employment. Some, however, will climb to the top of the academic pile. As it does in the country's export sector, ferocious competition can help produce champion ideas. ■

The Long March

In step with Xi

BEIJING

China wants to revive the spirit of the Long March

IT IS A story of "perseverance, solidarity and hope". So claims an English-language documentary released by China's state media this month to mark the 90th anniversary of the official end of the Long March: the famously gruelling retreat by embattled Communists during China's civil war. The two foreign presenters of the series retrace small sections of the thou-

sands of miles the Communist Party covered, spouting platitudes along the way. "Not only did we see history, we also saw the future," says one, marvelling at the skyscrapers and data centres that have sprouted in the once-remote regions the Red Army marched through. "There will always be people marching on the road to hope," sighs the other, in the last episode.

Some may find this more than a little mushy. Luckily China released a second and more interesting documentary on the Long March this month, intended for domestic audiences. Called "The Great Expedition", it was co-produced by China's armed forces and broadcast to much fanfare on state television. It also celebrates China's modernisation since the dark days of the 1930s. But it makes this point with muscular footage of tanks, missiles and helicopters. And the documentary's takeaway is less guff about hope and more about the need for absolute loyalty to the party and its leader.

A central focus of "The Great Expedition" is Mao Zedong and his clashes with other Communists along the Long March, like Bo Gu, a Soviet-trained revolutionary, Otto Braun, a German adviser, and Zhang Guotao, a rival general. They had various disagreements with Mao over military strategy. But as the documentary relates with some relish, Mao was proved correct again and again. Bo and Braun were stripped of their command early in 1935; a little later Zhang dared to set up his own Central Committee (the party's governing body—see next story) and led his troops in a different direction from the one suggested by Mao. Zhang was humiliated after a catastrophic battle; the documentary camera pans out over the graves of his soldiers.

On social media, one enthusiastic reviewer summarised the key message: "When you're unsure what to do, look to Mao; when you encounter difficulties, look to him again." The implication for today's party members is pretty clear. Footage of Mao's successor, Xi Jinping, appears in the first few minutes of every episode. The documentary should, according to state media, "guide and inspire the entire party and the entire army...to unite more closely around the Central Committee with comrade Xi Jinping at its core".

Many of the party's 100m members will watch "The Great Expedition", if they know what is good for them. It has been put on a party app called *Xuexi Qiangguo*, which means both "Study the Strong Country" and "Study Xi to Make the Country Strong". Party members' usage of the app is tracked; they must log in daily. Soldiers, especially, should be keen viewers. Scores of generals have been purged in recent years for disloyalty. As Mr Xi has said: "Each generation has its own Long March." Everyone should stay in step on his. ■



Tourists enjoy a blast from the past

The Communist Party

Awayday jitters

With purges and promotions in mind, the party elite assembles

“OFF-SITES” AT HOTELS are among the more sorrowful features of modern working life. Who does not dread the awkward conversation over the breakfast buffet, the unexpected grilling from the boss during a presentation or the struggle to stay awake through the post-lunch carb crash? Spare a thought, then, for the 300 or so members of the Chinese Communist Party’s Central Committee who will soon attend one of the most brutal gatherings of the genre. The Soviet-style Jingxi Hotel in Beijing, where it takes place roughly once a year, is run by the armed forces. Mobile phones are thought to be banned, as are alcohol and cigarettes. Participants have to assume that every word is recorded by note-takers or bugs.

The “fifth plenum”, to be held from October 26th to 29th, will be especially fraught. It comes about one year before a quinquennial congress that is expected to give Xi Jinping a fourth term as the party’s leader. That means that he and other party bigwigs will be scrutinising potential candidates for promotion next year to the top decision-making bodies: the Politburo and its (now seven-strong) Standing Committee. What’s more, the theme of this year’s plenum is “full and rigorous party self-governance”—in other words, combating the corruption and indiscipline that continue to frustrate Mr Xi. So attendees’ personal conduct will be examined even more closely than usual.

Mr Xi might also spring a surprise, perhaps by floating proposals to adopt a new title such as party chairman (held by Mao Zedong). A plenum in 2016, also a year before a congress, established Mr Xi as the party’s “core leader”. That paved the way for him to scrap term limits on the presidency. And a year before a congress in 2022 another plenum further elevated his authority by granting his political doctrine equal status to those of Mao, Communist China’s founder, and Deng Xiaoping, the architect of reforms that began in 1979.

The plenum’s precise mechanics are secret. But based on limited official accounts of previous ones, it will start with Mr Xi delivering a report from the Politburo on its work over the preceding year. Next he will make a speech explaining the main item on the plenum’s agenda, in this case a “decision” on party self-governance. Participants are then expected to divide into about ten groups to discuss the report and

the proposed decision. These breakout sessions usually include one each for military delegates, regional leaders and the chiefs of state-owned enterprises.

In the past the smaller meetings have sometimes involved fierce debate over ideology or policy. Not so under Mr Xi. Each delegate is expected to express approval of the party chief’s leadership, the Politburo’s report and the decision. But they must try to do so in pithy, creative terms while heeding Mr Xi’s increasingly dire warnings against self-promotion, flattery or performative parroting of party slogans. If they strike the right balance they might hope to get their remarks included in the note-takers’ summary of discussions, which is thought to be sent to top leaders at the end of each day. Better still is to catch the eye of Mr Xi, who usually drops into group talks in person along with other Standing Committee members.

On the last day the delegates reconvene and vote (unanimously, unless they are intent on career suicide) to confirm the expulsion of purged Central Committee members and to appoint replacements. That could reveal fresh victims of Mr Xi’s purges, which have already ensnared some 20 full members of this Central Committee, including three in the Politburo. Some of the committee’s members have already been replaced, leaving eight empty seats. Another 15 could be expelled, reckons the

Asia Society Policy Institute (ASPI), a think-tank in New York.

There could be signs that others are in trouble if they do not attend or are not promoted. And there may be new appointments to the Central Military Commission, which controls the armed forces (although that normally happens at a congress). The commission currently has just two members—Mr Xi and a general—following a purge of the other five.

Participants then vote (unanimously again) to approve the decision on party governance. It is expected to reinforce anti-corruption work with measures including closer oversight of government spending, enhanced use of big data and more accountability for officials whose subordinates break the party’s rules. It might also bolster the power of bodies that investigate errant officials. In a speech published (with omissions) on October 15th, Mr Xi said the party needed to “confine power to a cage of institutions”. He cited threats including “nice guys” who ignore problems, “two-faced” officials who secretly hold liberal views, and a “revolving door” between business and government.

Mr Xi’s goal appears to be to win support among the elite for his next five-year term and his quest to revitalise the party. If so, he is also revealing the limits of his powers to implement change, suggest Neil Thomas, Lobsang Tsering and Shengyu Wang of ASPI. In a recent paper they compare Mr Xi to a Leninist Logan Roy, a patriarchal character in the TV series “Succession”. Like Logan, Mr Xi “presides over an enormous enterprise, exercises commanding authority and remains perpetually disappointed by the people expected to carry out his wishes”. In Mr Xi’s view, they add, there is only one model of diligence to emulate: that of his own younger self. ■



An off-site in 2024, before leadership optimisation

CHAGUAN

Artificial control

In full command of its own cyberspace, China wants the same for AI



“GUARD THE golden three seconds, guard your wallet.” In recent weeks a video of an avuncular policeman, Guo Tao, delivering this message—a warning about how to handle fraudsters on the phone—has spread widely in China. All it takes is a simple greeting for criminals to capture one’s voice and then use artificial intelligence to synthesise it for duping friends and relatives. So, as Mr Guo says, it is best to stay silent for three seconds when called from unknown numbers, to see if a real person speaks. Not bad advice. It also relates to one of the tech world’s most pressing questions: what does China think about the risks posed by AI?

Many observers believe China does not care much about the dangers. Donald Trump is one. “China will be doing absolutely nothing to stand in the way of AI,” he claimed last month, explaining his own disdain for regulation. Indeed, surveys point to overwhelming Chinese optimism about AI. In a poll by Gallup, 93% of respondents in China said it would mostly help their country, versus just 36% in America. Calls for China to work with America to slow down frontier models have been brushed aside in Beijing. “Fearmongering” serves no one, says China’s foreign ministry.

In fact, China spends an awful lot of time thinking about AI safety. Telephone fraud is just the tip of an iceberg of anxieties. China’s concerns run from criminal activity, labour displacement and national security to, yes, the loss-of-control scenarios causing sleepless nights in Silicon Valley.

This should not be surprising. The Communist Party, which obsesses about danger in almost every domain of life, has fought for years to bring cyberspace under control. Is a regime that views the internet as an existential challenge suddenly about to let AI rip? If, as in the Trump administration, one defines regulation as intrinsically a form of slowdown, then China is, in effect, slowing AI—though it would never say so. “China already has the most stringent AI rules anywhere in the world,” says Kendra Schaefer of Trivium, a consultancy based in Beijing.

The foundational document is China’s framework for the governance of AI safety. A second update came out in September. It lists 54 risks under three categories: “inherent” (models behaving in unintended ways), “application” (use by criminals) and “second-

ary” (social alienation). It also proposes ways to eliminate or, at least, mitigate these threats. One is to require checkpoints at which humans (remember those?) must review and, if necessary, halt AI agents before they roam too widely.

Some of the framework’s earlier ideas are already in force—for instance, AI-generated content such as audio and video must be clearly labelled. Others are likely to form the basis of new rules. Draft measures call for service providers to shut down any feature with serious problems immediately. On October 16th China also proposed curbs on exports of its most advanced AI technologies.

As AI has grown more powerful, China has paid more attention to doomsday possibilities. The original version of its safety framework, issued in 2024, made just one glancing reference to loss of control. In the newest version, that topic comes up more than a dozen times. Even so, it is possible to discern a philosophical gap. Whereas some in America fear that AI models will eventually surpass human intelligence and take control of their own evolution, the more common view in China is that AI is a transformative technology that can be harnessed and directed, not something that will slip human grasp.

Xi Jinping compares AI to the steam engine, electricity and the internet—technologies that were epoch-shaping but did not pose dangers that required a co-ordinated slowdown. With China still trailing America at the frontier of AI, Mr Xi is all the less inclined to agree to apply the brakes. As China sees it, such an agreement looks both unnecessary and self-serving for Americans.

Domain expertise

Unsurprisingly, Chinese officials devote much bandwidth to ideology. They want to ensure that models do not contradict the party on important matters, and that new tools do not undermine its control. Yet there are more banal concerns, too, reflecting the soft paternalism of the Chinese state. Hence Mr Guo’s three golden seconds on the phone and a ban on offering virtual lovers or, for that matter, virtual relatives to minors.

China’s yen for rules may have an unintended effect. In America, where the government has a much lighter touch, companies have stepped into the breach, evaluating their own models and asking for more guardrails. In China firms are often more passive, waiting for directions from the party and government before applying controls. A review by Concordia AI, a consultancy in Beijing, of ten Chinese firms with recently released models found that just five had published safety evaluations. That suggests possible perils if models develop faster than regulators expect.

China’s rules will also fail to impress those who view its open-weight models as unavoidably dangerous. Critics fret that such models, unlike the closed ones dominant in America, can be abused more readily. Yet many in Chinese AI argue the benefits outweigh that hazard: they note that China’s open models have helped defend computer systems from rogue attacks launched by American closed models, as when OpenAI tools breached Hugging Face, an AI platform. In any case, China is already working on tougher rules to govern open models. Insiders say that new releases face exacting safety reviews before being offered to the public.

By most measures China’s AI models are a few months, or more, behind America’s in their performance. That is a big gap for such a fast-evolving technology. But do not accuse China of lagging behind America in its management of risks. When it comes to rules, controls, limits and warnings, China is in its element. ■

Middle East & Africa



Saudi Arabia's ruler

Feeling the heat

RIYADH

Everything is going wrong for Muhammad bin Salman

IN ANY OTHER year, Muhammad bin Salman would be getting ready for his star turn. October 26th was supposed to have been the start of the Future Investment Initiative (FII), an annual summit in the Saudi capital that is sometimes dubbed “Davos in the desert”. The crown prince usually spends the week glad-handing heads of state, titans of finance and other dignitaries, all of them eager to do business with his kingdom.

Not this year. The Houthis, an Iran-backed militia in Yemen, have spent weeks firing missiles and drones at Riyadh. The airport is still, in effect, shut after a series of deadly attacks. Many Western governments have warned their citizens not to

travel to the kingdom. Executives were nervous that hotels or other venues could be targets. After days of deliberation, organisers decided on October 19th to postpone the event until next year.

As he rose to power a decade ago, Prince Muhammad made a few big gambles. He wagered that he could defeat the Houthis; that he could reshape the Saudi economy; and that Donald Trump would prove a reliable ally. All of them have gone awry at once. The decision to cancel FII is emblematic of Prince Muhammad's *annus horribilis*. He faces a set of interlocking crises, none of which has a ready solution.

The Saudis failed to defeat the Houthis, but they had hoped a ceasefire agreed on

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in 2022 would contain the threat. Instead the truce began to unravel this summer because of America's broader war with Iran. The Houthis have seized additional territory in Yemen and battered Saudi Arabia. People close to the crown prince see only bad options. The kingdom can send ground troops into a bloody war; continue a campaign of air strikes that is unlikely to succeed; or make a deal that helps cement the Houthis' rule in Yemen.

A long conflict will derail the prince's economic programme, which was sputtering even before 2026. Big projects were being shelved amid a strain on public finances. Wages have not kept pace with inflation. Annual foreign direct investment is only about one-third of the crown prince's \$100bn target. A year ago the IMF expected the Saudi economy to grow by 4% in 2026; now it expects a 3.3% contraction.

Whether it rebounds in 2027 will depend on whether peace breaks out in the Middle East—and that will depend largely on Mr Trump. The kingdom thought it had influence over him. It wooed him by promising to invest implausible sums in America. It also made tawdry deals with the first family, paying Trump-owned golf courses to host Saudi-funded tournaments and investing \$2bn with Jared Kushner, the president's son-in-law. None of that stopped Mr Trump from embarking on a disastrous war. “He's not loyal to anyone for long,” says one well-connected Saudi.

There are no reliable public-opinion polls in the kingdom, but it is fair to say most Saudis trust their government. Some have found recent weeks unnerving, nonetheless: the war in Yemen has caused real disruption. Yet since October 10th, when a Houthi missile killed 13 people at Riyadh's airport, Prince Muhammad has been largely invisible. It fell to ministers to visit victims and offer reassuring messages.

A few Western commentators have begun to ask whether this crisis-filled year poses an existential threat to the crown prince's rule. The view among diplomats in Riyadh is that such talk is overblown. “He was in a much tougher place seven or eight years ago,” says one Western envoy.

Back then the prince was a newly appointed heir, still consolidating his rule. The war in Yemen was already a quagmire, the blockade of Qatar was upsetting America, and much of the world was horrified ▶▶

▶ when Jamal Khashoggi, a Saudi journalist, was murdered inside the kingdom's consulate in Istanbul. Prince Muhammad's grip on power is far more secure today: he has sidelined rivals and centralised power unlike any Saudi ruler since King Abdulaziz, the founder of the modern state. Though he certainly has his detractors, none could plausibly organise a putsch.

Nor is he facing much criticism from allies. The response to the recent escalation in Yemen has been telling: even long-time critics of the war are now willing to acknowledge that the kingdom has little choice but to fight. "I do understand that this is a different moment than 2018 or 2020. They are facing these Houthi advances and Houthi rocket attacks," says Chris Murphy, a Democratic senator who met the crown prince in Riyadh this month. "We should recognise that."

Seen in another light, though, this is a more challenging moment for Prince Muhammad. Because the woes of his early years were mostly self-inflicted, they were easier to fix. By 2021 he was steering Saudi foreign policy in a more pragmatic direction. He ended the blockade of Qatar and sought a deal with the Houthis. Even the Biden administration, which took office promising to make the crown prince a "pariah", grudgingly praised his new direction.

You gotta be wiser

This year is harder. The biggest decision is out of Prince Muhammad's hands. He has urged Mr Trump not to escalate the war with Iran. If the president ignores him and resumes bombing after the midterm elections in November, Saudi officials worry the kingdom will take blows from all sides: the Houthis to the south, Iraqi militias to the north and Iran itself to the east. They have a big country to protect—four times the size of France—and not many air-defence interceptors left to do it.

In his first decade, the crown prince made laudable strides towards liberalising Saudi society. Women can drive. Female labour-force participation has almost doubled. Concerts and cinemas are now widespread in a country where fun was long verboten. A few well-off foreigners can even enjoy a legal tippie. But the core of the Saudi state has changed little. Its economy still depends on oil money, its army is still built to protect the regime rather than wage war, and its foreign policy still relies on America as an indispensable protector.

Perhaps eventually those things will change as well. The Mecca pact, a mutual-defence agreement with Pakistan and Turkey, is an effort to find new allies that could supplant a now unreliable America. But those changes will take time. In his second decade, the test for Saudi Arabia's ruler will be to change the foundations, not just the façade. ■

Israel's election

The more things change

KFAR QASIM AND SDEROT

A deeply divided Israel is getting ready to vote

ON THE MORNING of October 7th 2023 Hamas fighters drove through the Israeli town of Sderot, less than a mile from Gaza, shooting at civilians. For Israelis, the small city became a symbol of the extent to which their nation's defences had failed. In the last election, in 2022, over three-quarters of its voters plumped for parties that joined the coalition government of Benjamin Netanyahu, Israel's prime minister. But nine days before the country's next election, Gadi Eisenkot and Naftali Bennett, the leaders of the two big centre-right parties and Mr Netanyahu's main challengers, were there to hold him to account.

Three years after the massacres of October 7th, Mr Netanyahu's rivals are determined to make the election a reckoning for that day and the wars and bloodshed that have followed. "Whoever promises total victory is hoodwinking the public," Mr Eisenkot said on his visit, in reference to Mr Netanyahu's wartime slogan. "He has nothing to offer." Those listening murmured in assent, but many more in Sderot still back the prime minister and his allies. Travelling around Israel, it is clear that the country is deeply divided. No party is set to win over 20% of the vote. Political alliances are shifting. Mr Netanyahu and his allies have no obvious route to power but his squabbling foes may not be able to form a coalition either.

Sderot is a hardscrabble "development

town" in the Negev where in the 1950s Jewish immigrants from elsewhere in the Middle East, the *mizrahim*, were sent to live. Resentment towards what many there see as an elite dominated by Ashkenazi (European) Jews still lingers, fuelling votes for Mr Netanyahu's Likud and its allies.

Sderot and towns like it are plastered with pictures of Mr Eisenkot with the slogan "A prime minister *dialna*", an evocative word in Moroccan Arabic that means "of us". If he wins, he will become the first prime minister descended from the *mizrahi* wave of immigration. Many Israelis would prefer him or Mr Bennett to lead the country. But the prime minister has beaten the polls and expectations time and again.

Twenty minutes down the road from Sderot is Netivot, another coalition stronghold. Most of the customers at a popular couscous joint reckon Mr Eisenkot is in the clutches of "the left". Three contractors eating lunch all voted Likud in the past. But only one, Kfir Almassi, says he's "sticking with Bibi". The other two are disappointed with the inconclusive outcome of the Gaza war. "Bibi is too left-wing for me," says another, Nave Cohen. He plans to vote for the Jewish Power party. Its leader, Itamar Ben-Gvir, currently the national-security minister, promises to make the population of Gaza "voluntarily migrate" if he remains part of the government. The third, Yaniv Magen, plans to vote for Yisrael Beiteinu, an opposition party led by Avigdor Lieberman, a nationalist who has sworn to remove Mr Netanyahu but, like others in the opposition, refuses to join a government supported by Arab-Israeli parties.

And yet splits among religious and right-wing voters threaten the prime minister's grip on power. Netivot is a stronghold of Shas, the *mizrahi* ultra-Orthodox party led by Arye Deri, Mr Netanyahu's oldest political ally. But a new Haredi party has sprung up there. It is unlikely to cross the electoral threshold of 3.25% but it could still deny Shas, and thus the Netanyahu bloc, a seat.

Another new party, the Haredi Public, is challenging the established ultra-Orthodox parties. These have long been close partners of Likud and the recipients of lavish public funding for religious schools that fail to teach subjects such as maths and science. The Haredi Public represents young ultra-Orthodox Jews who want their children to have the skills to join the workforce and even enlist in the Israel Defence Forces. "We probably won't cross the threshold," admits one activist at a packed rally in Jerusalem. "But we're founding a movement to change our community and that's more important." Mr Netanyahu, worried that they, too, will cost his coalition seats, has tried—unsuccessfully—to persuade the Haredi Public to withdraw.

Meanwhile in the coffee-shops of Tel Aviv



The government always gets in

► Aviv, Israel's liberal bubble, secular Israelis feel the pressure to vote tactically. Some like The Democrats, a merger of the two struggling parties of the Zionist left, but reckon Mr Eisenkot's Yashar is more likely to beat Mr Netanyahu, even if it is more right-wing than they would prefer.

Many who care about Israel's treatment of the Palestinians feel politically homeless. "Neither The Democrats or Mr Eisenkot are addressing the conflict with the Palestinians," says Sarah Ben-Yaakov. She's leaning towards Ra'am, an Islamist party which in 2021 became the first independent Arab party to join a ruling coalition.

It is increasingly clear that the Arab

parties could be the deciding factor in this election. In Kfar Qasim, an Arab town east of Tel Aviv, a large Likud billboard looms, warning of the danger of Mr Eisenkot joining Arab partners. "They put the sign there to make us despair of any chance to influence events and not vote," says Issa Amer, an engineering student.

In 2022 only 53% of Arabs voted; general turnout was 71%. Pollsters expect many more Arabs will vote this time. The Arab parties could win more than their current ten seats. They might take seats from Mr Netanyahu's bloc. But given the opposition's qualms, they could make it harder for Mr Eisenkot to replace him. ■

Russia in Africa

Propaganda extravaganza

CAPE TOWN AND SÃO TOMÉ

The Kremlin is betting it can sway public opinion on the continent

ON OCTOBER 28TH African leaders will gather in Moscow for the third Russia-Africa summit since 2019. For Vladimir Putin the event is part of a concerted effort to persuade the global south that Russia is fighting on behalf of what he calls the "global majority" against "neocolonialism". The bid has gathered pace since Russia's full-scale invasion of Ukraine began in 2022. At the most recent summit in 2023 a spokeswoman claimed that "Russian men give their lives at the front so that people from the African continent are free."

Many African leaders will scoff at such sentiments. But Mr Putin believes that the continent provides fertile ground for seeding Russia's poisonous ideas. In February Sergei Lavrov, the foreign minister, said 90% of the Russian officials expelled from Europe had been reassigned to the continent. Russia has stepped up attempts to sway African hearts and minds through cultural diplomacy, the Orthodox Church, higher education, professional groups, media ventures and disinformation. As with its more muscular military interventions on the continent, it is hard to assess the success of this cognitive warfare. But Russia benefits from lingering sympathies for the Soviet Union as well as legitimate African criticisms of richer countries.

Russian efforts are like matryoshka dolls: there is more to them than meets the eye. Take cultural diplomacy. In September Russia said it would expand the number of "Russia Houses", cultural institutions that operate under the ministry of foreign affairs, in Africa from 16 to 24. Critics, such as Ivan Klyszcz of the International Centre for Defence and Security, an Estonian

think-tank, call them "nodes in Russian propaganda networks". The films they show support Kremlin narratives: "Battle for Africa", a documentary about how Russia came to the aid of Sahelian countries defying French "neocolonialism", or "Why I Moved To Russia", about Americans who supposedly fled wokeism at home. Ukraine alleges that the houses are used to recruit Africans to fight against it in the war. Governments in Europe are debating whether to close them in their countries for spreading propaganda.

The newest Russia House opened in São Tomé and Príncipe—a tiny former Portuguese colony that was a Soviet satellite

in the cold war—in September in a former physiotherapy practice on the capital's main road. An AI-generated collage with smiling São Tomeans and the Soviet slogan *amizade dos povos* ("friendship of peoples") greets visitors at the entrance. Posters of authors, monarchs, sports stars and cosmonauts "tell the Russian story", explains Inna Afanaseva, who runs the centre. A framed photo of Mr Putin stares down at students learning Russian.

A growing number of African students are moving to Russia: the latest tally, at 37,000 or so, is roughly five times greater than in 2010, in part because of an increase in scholarships. It recently surpassed the peak during the cold war, when the Soviet Union educated a generation of African elites, including the current presidents of Angola, Ghana and Namibia.

Russia Houses host meetings of professionals who studied in the Soviet Union, part of an effort to reactivate old relationships. They also convene gatherings for the Orthodox Church. The Kremlin has supported the church's expansion in Africa, which is home to many conservative Christians, to position Russia as a haven for traditional values, in contrast to a supposedly decadent West.

Russia promotes media outlets on the continent. RT, a state-run service, has struck content-sharing deals with outlets such as Afrique Media from Cameroon. African Initiative, launched in 2023, claims to be an independent news agency but has close links to former members of the Wagner Group, a state-funded Russian mercenary outfit, and Russian intelligence, according to a report published by the French government last year. The report alleges that the outfit is behind false stories that blame America for spreading dengue fever in Burkina Faso and has probably ►►



Part of the target audience

► spread the claim that France supports the jihadists who plague the Sahel.

Like many Russian efforts it works in tandem with African creators. Gandhi Malien Web TV, which is supported by African Initiative, has a talk show with a Malian presenter and a Russian journalist. In Burkina Faso “L’Heure Russe” is presented by MC Ruskof, a Russo-Burkinabe rapper.

Russian media are seeking influence over African journalism. RT and other state-funded outlets have held at least 20 training events for African journalists from at least 29 countries since July 2025. These courses include practical tips. But the material is tendentious. Ukrainian prisoners of war are labelled “neo-Nazis”. The massacre in Bucha at the start of the Ukraine war is used as an example of “fake news” that needs to be fact-checked.

Other falsehoods are pushed by a mix of online and offline campaigns. This year Forbidden Stories, a coalition of journalists, reported that a Russian-backed influence network known as “the Company” paid reporters throughout the global south for fake stories which ran in local media. To take one example, the campaign sought to undermine the Lobito corridor, an American- and EU-funded infrastructure project in Angola.

Russia also creates fake journalists. In a report published in August, Code for Africa, an NGO, and Graphika, a firm, identified as many as 35 ghost “reporters” with fake profiles. Their “articles” were published in real media outlets, whose content was picked up by others, creating a cycle of “information-laundering”. AI was often used to create personas and write stories and translate them into local languages.

Similar ghosts are appearing in other areas, says Justin Arenstein of Code for Africa. He notes the creation of fake academic research by fake academics that is uploaded onto preprint repositories, as well as fake think-tanks publishing reports that lend credibility to Russian narratives.

The impact of Russia’s efforts is hard to gauge. Few Africans watch RT or visit the website of African Initiative. Polls suggest that Russia is on average seen as a less positive influence on Africa than America, China or former colonial powers. That may reflect the fact that Russia has less to offer economically. Russia’s recruitment of African soldiers is a reminder of its war’s real costs, including to Africans.

Yet it would be wrong to take comfort from that. Mr Arenstein compares the impact of Russia’s campaign to termites eroding the structures of African societies. The Kremlin, he says, is unusual among disinformation merchants in that it deliberately tries to weaken social cohesion, rather than only promoting its own agenda. After all, the more fragile the country, the more Russia can exploit it. ■

Congo

A new rumble in the jungle

GOMA

Joseph Kabila joins a rebellion to unseat his successor as president

BACK IN 1974 Kinshasa, the capital of what is now the Democratic Republic of Congo, hosted a lavish boxing match known as the “Rumble in the Jungle”. Today the city is gripped by a different heavyweight clash. In one corner is Félix Tshisekedi, the president. In the other is Joseph Kabila (pictured), an ex-president, who on October 12th stunned the country by announcing that he would lead a rebel coalition against his successor “by all means, including the use of force”.

Mr Kabila’s move threatens to worsen the conflict in the war-riven east. It also complicates Mr Tshisekedi’s bid to change the constitution to stay in power past the end of his second term in 2028. If either man can land a knockout blow it will shape the future of Africa’s second-largest country—of great interest to America, given its quest for critical minerals.

The feud has a long history. The latest chapter began in 2019, when Mr Tshisekedi was declared the winner of an election with more rigging than a giant sailboat. In the aftermath he struck a power-sharing deal with Mr Kabila that recognised the former president’s majority in parliament. That pact was torn up acrimoniously in 2020. Kabila loyalists were purged and Mr Kabila ultimately went into self-imposed exile, where he complained privately to other African leaders about what he saw as a power grab by an illegitimate successor.



Rebel, rebel

Events in Kinshasa were inflamed by the conflagration in the east. In 2021 M23, a Rwandan-backed force, resurfaced after a dormant eight years, taking Goma and Bukavu, two regional capitals, in early 2025. To Mr Kabila, who was born in the east, the conflict was a reaction to his successor’s “tyrannical regime”. To Mr Tshisekedi, who won re-election less dubiously in 2023, the war was an invasion by Rwanda. When Mr Kabila moved to Goma in 2025, Mr Tshisekedi saw confirmation that his successor was a Rwandan stooge. In September 2025 Congo sentenced Mr Kabila to death in absentia for treason.

Over the next year Mr Kabila and M23 denied any links. “Kabila is not our boss,” Corneille Nangaa, the head of the group’s political arm, told *The Economist* in May. But he is now. Mr Kabila’s coalition includes M23. He wants to use the rebellion in the east to bring change to Kinshasa.

Will he succeed? NGOs in Goma are watching for troop movements south to the mineral-rich Katanga region. Yet M23’s fighters are more reluctant to expand the battlefield than their political peers. Rwanda has shown no sign of wanting to broaden the conflict either. It may have endorsed the elevation of Mr Kabila because it makes the conflict across the border look more of an intra-Congolese fight. Uganda, another player, wants to preserve a deal that lets it station its forces in the north-east of Congo. America, which put sanctions on Mr Kabila this year for his links to M23, is unlikely to welcome any effort to destabilise the regime of Mr Tshisekedi, with whom it has struck mineral deals.

Other Congolese opposition figures may prove decisive. An unwieldy coalition known as C64 (after the 64th article of the constitution rather than the popular 1980s computer) opposes Mr Tshisekedi’s power grab. Some previously called for Mr Kabila to be included in a “national dialogue”. But supporting him will be harder now.

Mr Kabila’s best hope might be that Mr Tshisekedi is so spooked that he becomes more paranoid and autocratic. That could prompt strategic errors—some in Kinshasa say the death sentence for Mr Kabila is an example of such a mistake—and prompt a backlash by political elites. Mr Tshisekedi is already under pressure. On October 14th Belgian authorities raided his relatives’ houses in connection with an investigation into money-laundering.

That would amount to Mr Kabila adopting the political equivalent of the “rope-a-dope” strategy used by Muhammad Ali in 1974. By leaning on the ropes to absorb blows, Ali let his opponent, George Foreman, punch his way to exhaustion. Then he delivered a knockout blow. “It’s not bragging if you can back it up,” Ali apparently said. Congo is waiting to see whether Mr Kabila can back it up, too. ■

Europe



Riots in France

The collapse of reason

BORDEAUX AND PARIS

Devastation in French cities will benefit the extremes

IN LIMOGES the clock tower and roof of the 19th-century town hall collapsed after it was set alight. In Marseille *casseurs*, or hooligans, broke into the town hall. In Bordeaux hooded looters smashed the glass windows at Louis Vuitton and nearby shops, grabbing handbags, trainers and other stash. Pyres of electric scooters burned on street corners. Plumes of black smoke billowed in the air. Across the country over 2,000 people were arrested. “This evening we are all feeling anger, and shame,” declared President Emmanuel Macron in a televised address, before jetting off for a trip to the Gulf.

France is no stranger to upheaval. But even in a country hardened to street revolts, the events of October 17th were shocking. What set off this outburst of destruction? Mr Macron faced months of violent demonstrations by *gilets jaunes* (yellow jackets) in 2018-19. Yet the combination of devastation on the streets and pow-

erlessness by the authorities was worse. It encapsulated a paralysis at the heart of government, a collapse in confidence in centrist politics, and lays the ground for greater division: voters at next spring’s presidential election could face a choice between the populist-right Marine Le Pen and the populist-left Jean-Luc Mélenchon.

The chaos was the result of a combustible mix on the streets—and an inadequate police presence. Laurent Nuñez, the interior minister, conceded that the police

had “lost control”, and a parliamentary inquiry has been opened. Those on the streets fell into three groups. The first were the half-million students, teachers and unionists who protested peacefully against underinvestment in education and the cost of living. “The *casseurs* are discrediting our movement,” complained Pauline, a 20-year-old university student, who said she was demonstrating against “everything”, from overcrowded lecture halls and high petrol prices to police repression. The unpopular president was also on her list. “*Macron, t’es mort*” (Macron, you’re dead) read graffiti near a smashed-up bus shelter, next to “ACAB”, or “all cops are bastards”.

A second group, the *casseurs*, have a history of infiltrating demos. Dressed in black and full-hooded, often wearing ski goggles and face masks, they looked to pick a fight. In France there are 600-800 members of such ultra-left groups, often anti-capitalist anarchists, said a parliamentary report in 2023. They are agile, covert and deft at evading the police. Of 48 “black blocs” (a group of *casseurs*) arrested after protests in 2023, 85% were men and 75% aged under 33. Most are well educated and not poor, noted the report. They seek “to create trouble in order to overturn the system”, said Mr Nuñez, then head of the Paris police.

The third group were opportunistic looters. Messages shared on TikTok guid- ➤

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► ed youngsters to smashed-up shopfronts. In Bordeaux one young man casually swung stolen goods inside a shopping basket; others ripped looted Nike trainers from their boxes and ran. Within hours stolen goods were put on sale online—"jumper stolen during the demos" read one description—before the websites took them down. Some 3,000 shops and businesses were looted or vandalised.

Intelligence services had forecast a turnout of 200,000; the number was over twice that. Some 60,000 police officers were deployed, about a third less than during the worst days of the *gilets jaunes* protests. During earlier protests police were accused of brutality. This time shopkeepers were enraged that they were left to fend for themselves. Calm returned after Sébastien Lecornu, the prime minister, authorised partial curfews in Bordeaux, Paris, Marseille and other cities. Soldiers will help keep guard for the next protests, planned for October 24th.

The underlying tension is linked to the election, which is polarising politics. After nearly a decade in office, the centrist Mr Macron is constitutionally barred from running again. Many protesting students have no memory of life under a different leader. France wants change, but is deeply divided about what should come next.

Supporters of Mr Mélenchon, who joined the demo in Paris, saw the protests as a show of strength for their champion. Beforehand 69% of the French told a poll they backed the protesters, rising to 92% among his supporters. Backing for his Unsubmissive France (LFI) party is strong among the young and in the ethnically diverse *banlieues*, or suburbs, where schools are in the worst shape. A poll taken after the riots showed his base had held strong. Mr Lecornu, who blames the LFI for "exploiting" the protests, warned that the extreme left is using the violence as a "warm-up round" for the election. Mr Mélenchon blames the government for the disorder.

The real beneficiary, though, is Ms Le Pen. She got a small bump in the polls, which now give her 34-38% in the first round of the presidential election; Mr Mélenchon is on 15-20%. On October 18th she gave a presidential-style address, blaming the violence on "politicised casseurs" and "criminals from the *banlieue*". Ms Le Pen regards the protests as evidence that Mr Mélenchon is unfit for office and that Mr Macron cannot control the country. One poll finds she would win a run-off against Mr Mélenchon by 68% to 32%.

Debate is shifting to law and order, which plays into her hands. Donald Trump claimed that France is being "burnt to the ground" by migrants. But nearly all of the demonstrators are French, with white people as well represented as any other ethnicity. A government minister hinted at a racial

element, but just among looters, blaming "a criminal fraction from the *banlieue*".

This is fertile ground for foreign interference too. NewsGuard, an American disinformation monitor, found that 14 fake reports, often pointing the finger at migrants, were linked to a Russian influence operation. An AI-generated image of the Palestinian flag atop the Eiffel Tower was viewed 3.7m times. Mr Macron said there was indeed "foreign manipulation", not of the events themselves, but about the narrative of what happened.

The violence risks distracting France from the public debate it needs: about what sort of welfare system it can afford and how to generate the wealth required to

sustain it. The public finances are in a dire state and the bond markets are jittery. Yet the centre is split, and lacks a compelling candidate. And the leading politicians vow to lower the retirement age, thus depriving themselves of future savings on the single biggest item of public spending.

Part of France understands this. The silent constituency was out again in the terrace cafés the day after the riots; a waiter in Bordeaux called the violence "scandalous". But radicals are masterful at drowning out such voices. Unless the centre can find a persuasive way to tell a responsible story, about the need for order in the public finances and on the streets, voters will end up with no choice but the extremes. ■

Demos and riots

A bit of the old ultra-violence

BELGRADE AND ROME

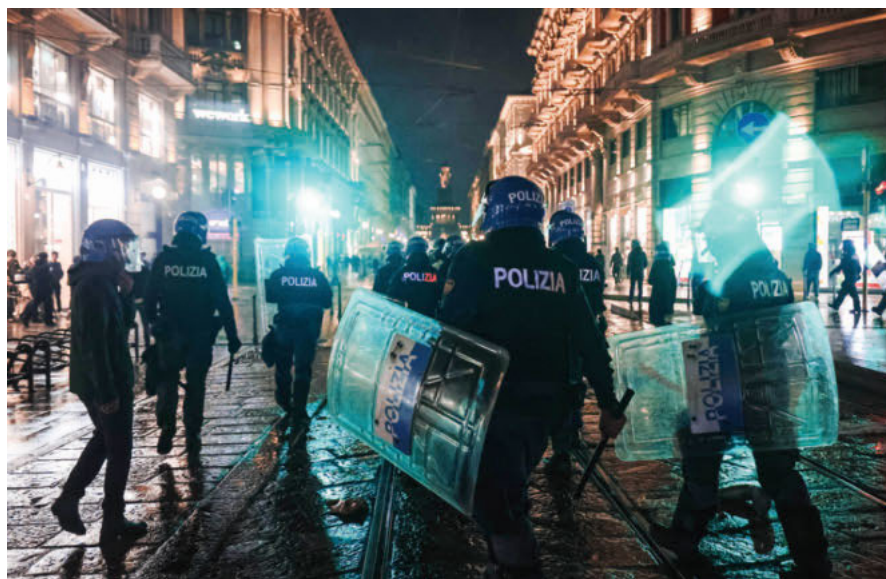
Radicals are turning protests into riots, and usually hurting their causes

IN SEVERAL EUROPEAN countries, leftists inspired by weeks of protests in France have launched mass demonstrations of their own. But as in France, such protests are likely to benefit the right if they turn violent. The clearest case is Italy, where in October secondary-school students began imitating their French peers and occupying classrooms in protest against underfunding. Those have grown into broad demos over the cost of living, backed by left-wing parties and unions.

Things changed on October 17th, when several marches were hijacked by black-clad gangs. Riots erupted in Turin and Bo-

logna, and fires were set in Milan's Piazza del Duomo. Shops were looted, dozens of police injured and hundreds arrested. An October 17th Movement has emerged on Telegram and Instagram, calling for protests every Saturday until the government falls. A march is planned in Rome on October 24th, and many expect violence.

The rioters lack obvious leaders but have an unofficial soundtrack: Fabri Fibra's "In Italia 2024", a doom-laden anthem of social exclusion and rebellion. "We're only at the beginning," says Marracash, a rapper from Barona, a poor neighbourhood in Milan. The immigrant backgrounds of many ►►



Taking back la strada

rioters have provided ammunition for Matteo Salvini, head of the populist-right Lega party, to call for barring the Italian-born children of immigrants from acquiring citizenship if convicted of crimes.

Italy will hold a general election next year. Giorgia Meloni, the populist-right prime minister, has challenged the progressive Democratic Party and Five Star Movement to condemn the violence. By backing the legitimate demonstrations, they risk seeming to condone the rioting. Fear of disorder will probably benefit the right, says Raffaele Marchetti of the Luiss University in Rome. On October 20th Ms Meloni's cabinet allowed preventive detention of minors, and gave policing powers to 500 soldiers in Milan. Yet the riots may benefit not her, but her rivals on the right. Roberto Vannacci, a far-right former general, and his opposition National Future party have said the police should use rubber bullets and dogs to disperse protesters.

Demos elsewhere also pit left against right. Spaniards have been protesting over housing costs since September, backed by Pedro Sánchez, the Socialist prime minister. Big protests over the cost of living have broken out in Portugal and Greece. On October 17th a few hundred far-left activists clashed with police in Brussels.

But the most violent demonstrations outside France and Italy are in Albania, and have a different background. Albanians have been protesting against the government of Edi Rama, the prime minister, since May 31st. For months the demonstrations were peaceful; prompted by a plan by Jared Kushner, Donald Trump's son-in-law, to build a beach resort in a nature reserve, they were dubbed the Flamingo Revolution. But since October 13th a violent wing of the movement has attacked ministries, courts, banks and shops.

The Flamingo protests were always about more than resort development. Despite economic progress in recent years, Albania is one of the poorest countries in Europe and corruption levels are high. Mr Rama claims the riots are encouraged by Russia and Iran. He refuses to resign, and promises huge bonuses to police to take back the streets. One academic, who requested anonymity for fear of retaliation, said the protesters' belief that they could force the prime minister out had been misplaced, but that his hard-line response had destroyed his legitimacy: "I don't think there is any coming back from this."

Most protesters despise the opposition leader, who was himself driven out as president by protests in 1997. But this week's riots could mark the beginning of Mr Rama's end. The riots in Albania, France, Italy and elsewhere do have one thing in common. Citizens are demanding things that governments, whether because of corruption or fiscal reality, cannot provide. ■

Satellites and rockets

In space, no one can hear EU scream

PRAGUE

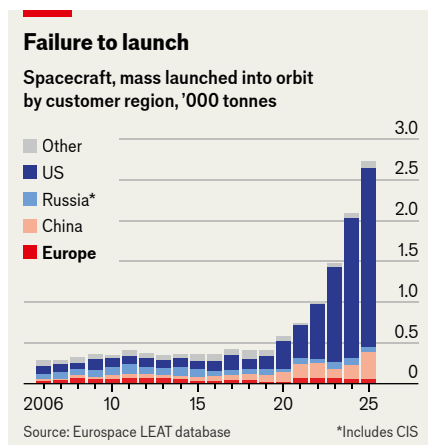
Europe tries to escape America's orbit

THE SCARIEST signals that America is turning against Ukraine came, this month, from space. Ukrainian drones' links to Starlink, Elon Musk's satellite-internet service, began cutting out. Although some Russian missiles smacked into Kyiv with no warning from American satellites, Ukraine says intelligence sharing was not cut. But European defence chiefs worry that if it were, they could offer only partial substitutes. And they depend on America's space capabilities themselves.

This is hastening efforts to develop alternatives. The day after Ukraine said Starlink had been restricted, shares in its closest European competitor, Eutelsat, surged by 23%. The European Union is speeding approval for merging the satellite-making businesses of three large European aerospace companies, hoping to challenge Mr Musk's SpaceX. And on October 19th four big European telecommunications firms said they want to partner with a satellite company to compete with Starlink.

Yet Europe has a long way to go in the three crucial areas it depends on America. The first is satellite-internet service. The second is space-based intelligence, surveillance and reconnaissance (ISR) and early warning for defence. And the third is launch capacity: rockets and spaceports.

For decades, the space gap was widest in defence. America kept Europe dependent by letting its allies freeloader on programmes like SBIRS, a missile-warning constellation. But America also opposed Europe's efforts to develop its own capabilities. It tried to block Galileo, a satellite-navigation system, saying it would compete with America's own GPS satellites.



Now, however, the biggest gap is in satellite internet. Europe's closest answer to Starlink is OneWeb, whose parent company, Eutelsat, is part-owned by the French and British governments. OneWeb was founded before Starlink, but was rapidly eclipsed by it: as a division of SpaceX, Mr Musk's rocket company, Starlink had ample capacity to get satellites up (see chart).

OneWeb is used by Ukraine and by the French and British navies. But where Starlink has over 10,000 satellites, OneWeb has about 600, so it cannot carry as much data or serve as many users. And because its satellites orbit higher, users need bigger terminals; the cheapest cost \$9,000, 45 times more than a basic Starlink terminal.

The EU plans to spend €16bn (\$18bn) on IRIS², a constellation of 348 communications satellites, for its governments and armed forces. But the first will be launched only in 2029. Germany plans its own network of 100 military-communications satellites at a cost of around €10bn. That has led to concerns of fragmentation.

There is more encouraging news when it comes to space-based ISR, mainly thanks to private European newcomers that produce small surveillance satellites quickly. Admiral Anders Sundeman, the head of Sweden's space force, says that if asked a year ago how long it would take to launch his country's first spy satellite, he would have estimated 2030. "We launched it instead this year," he says (albeit on an American SpaceX ride-share flight). It was made by Iceye, a Finnish startup. Sweden has also signed a deal to buy small spy satellites from Planet Labs, an American startup with a factory in Germany.

Having lots of cheap satellites makes it easier to cope with losing a few. That is a real risk. In mid-October a Russian satellite manoeuvred close to one made by Iceye that provides intelligence for Ukraine. Other American capabilities will take longer to replace. One is a ballistic-missile warning system. France and Germany are teaming up to build one, but it will not come online until the early 2030s.

Finally, none of Europe's plans will work without more launch capacity. Arianespace, a European company, can fly heavy payloads into orbit. But it launches far fewer rockets than SpaceX and at much higher cost. And there is a looming shortage of capacity as SpaceX gradually retires the Falcon 9 rocket, its workhorse.

If European countries hope to drive down the price of their rockets, they will need to commit to long-term spending plans while also encouraging competition. "If you want your launcher to be as cheap as possible, you need to launch it very regularly," says Olivier Lemaitre, the secretary-general of Eurospace, a trade body. Europe's countdown towards space autonomy will not last for ever. ■

America and Ukraine

Signal failure

KYIV AND WASHINGTON

The Starlink cut-offs were a test. Worse may follow

IN WASHINGTON LAST week's move to cut Ukrainian drones' connections to Starlink, Elon Musk's satellite internet service, might have seemed like a diplomatic warning. In Ukraine it was felt on the battlefield. In a single sortie, one unit saw \$1m-worth of drones fall from the sky after limits were imposed on any that flew faster than 160kph. No one in Donald Trump's administration admits to making the decision. It appears to have come from a small circle around the president, Mr Musk and Steve Witkoff, the special envoy to Russia. Reports suggest Mr Musk wanted to punish Ukraine for striking Russian refineries. One official says he contacted the White House only after imposing the restrictions.

Mr Musk has a complicated relationship with Ukraine. In 2022 he used a similar mechanism to stop a naval drone attack near Crimea. He has frequently railed against President Volodymyr Zelensky. But his decision to provide satellite connectivity in the first days of the war was critical to Ukraine's survival. One insider insists Mr Musk is sympathetic to Ukraine, "though you do get the impression that Putin sometimes gets to him first."

For Vladimir Putin, the cut-offs capped a wonderful fortnight. On October 9th Mr Trump announced a dubious deal to buy Russian diesel. The Americans then demanded an "energy ceasefire", but explained this meant that only Ukraine must stop hitting Russian refineries, not that Russia must stop hitting Ukrainian power plants. Reports that Mr Trump restricted intelligence-sharing, though, were misleading. A failure by American satellites to warn Ukraine of incoming ballistic missiles may have been due to Russian jamming and bad weather.

An American government source insists Mr Trump is not trying to force Ukrainian capitulation, but is the victim of "a successful Russian info-op". The president, the source says, is panicked by terrible polling ahead of the midterms. Mr Zelensky is a convenient scapegoat. Mr Trump's envoys, Mr Witkoff and Jared Kushner, incorrectly see Mr Putin's motivations as economic and territorial rather than nationalistic, making them vulnerable to Russian manipulation. "Trump creates a horrible situation," says a former official, but he is also "dependent on idiots".

The American arm-twisting coincides with a rush to resurrect a lopsided peace

deal. On October 21st Mr Witkoff went to St Petersburg, where he praised Mr Putin as a "humanitarian". Ukrainian officials lack full details of the latest proposals, but the outline is familiar. There would be a demilitarised zone in Donbas. Russia would get American business deals, sanctions relief and political normalisation. Ukraine would get an investment package and EU membership in exchange for renouncing NATO membership. The newest sweetener for Mr Putin is an offer to restart Russian gas sales to Europe, which were due to be phased out entirely by year's end, and to restart the Nord Stream pipeline.

This is not America's to offer, and violates EU law. Nor does Russia seem inclined towards peace as it heads into its most destructive winter campaign yet. It will most likely stall while banking immediate concessions on sanctions. Ukraine's negotiators fear the American envoys will front-load lucrative business deals before the war has ended. From their perspective, "why wait and lose time?" as a Ukrainian official puts it. "Time is money."

A conversation on October 19th between Mr Zelensky and Marco Rubio, the secretary of state, offered Ukraine a glimmer of hope. His renewed involvement in Ukraine suggests a fightback by the administration's Russia hawks. But damage has been done. Mr Trump has again shown a preference for Mr Putin over Mr Zelensky. The Ukrainian president's confrontational responses have deepened tensions.

Mr Zelensky's turn to denouncing Mr Trump for "weak" decisions seems based on a gamble that an electoral drubbing will weaken him. That may be misplaced. The more a Democratic Congress investigates him, "the more aggressive he'll be", says a sympathetic congressional staffer. "This is not good for a country like Ukraine." ■



He keeps getting cut off

Germany's young conservatives

Among the Johanneses

BONN

The CDU's restive youth wing

THE BIG beasts of Germany's ruling centre-right Christian Democratic Union (CDU) all turned out last weekend for the congress of the Junge Union (JU), the party's youth wing, in Bonn. Each was given a prizefighter's entrance, with spotlights and pumping music. Friedrich Merz, the embattled chancellor, got "United through the storm". Hendrik Wüst, the premier of North Rhine-Westphalia, seemed surprised to hear "Baby you're the best", a cheeky choice by the organisers for a potential challenger to Mr Merz.

The JU is where young conservatives come to network and complain about the *Mutterpartei* (mother party). Almost all seem to be named Johannes. Last year the JU's head, Johannes Winkel, threatened to torpedo the government's plan to raise pensions. This year he said the CDU risked extinction and warned of dire consequences if new pension cuts are watered down. There are 20 JU MPs in the Bundestag, more than the government's majority of 12.

The young conservatives formed the vanguard of Mr Merz's campaign for CDU leader, thinking him a true-blooded conservative. But as chancellor he has disappointed them with borrowing binges and concessions to the Social Democrats (SPD), the junior coalition partner.

Mr Merz did earn the weekend's biggest applause by deploring a proposed coalition in Berlin led by the populist-left Die Linke party, which won an election last month. Many in the CDU believe that party is crawling with antisemites. In the midst of the conference, Die Linke agreed with the Greens and SPD to begin coalition talks. The JU responded with a resolution (pushed by another Johannes) demanding ostracism of any such government, under the hysterical Holocaust-invoking slogan *Nie wieder ist jetzt!* ("Never again is now!").

These days it is easier for the JU to rage against leftists than against the populist-right Alternative for Germany (AfD). The CDU still shuns the AfD. But some of its delegates in the parliament of Saxony-Anhalt, where the AfD won an election last month, may break the party line and give the radicals the votes to take office there. The CDU in Saxony-Anhalt, sighs a third Johannes, is an "unguided missile". No wonder many JU-ers doubt their leaders have a plan. "The party is crumbling," confided one, adding that he is embarrassed to tell his friends he is a member. ■

CHARLEMAGNE

The paradox of Paris

Or how France became ungovernable at home yet unstoppable in Brussels



THERE ARE better ways to vaunt the merits of your economic model than setting fire to your capital. But tell that to the French. In recent years protests have become such a fixture of national life it is hard to see when one set of *manifestations* ends and the next begins. Everyone from students to pensioners seems to walk about in a perennial huff. The political class is at war with itself, wondering if an unloved president will soon make way for a populist rabble-rouser. Bond vigilantes are giving a bloody nose to the over-indebted government in Paris, demanding ever-higher yields to finance its runaway budgets. The recent spate of violence gives the impression of a state at once bloated and overmatched. As always, the situation looks somewhat less dire from inside France than it does to outsiders. Still, who would want to emulate the policies of a place that seems so firmly on the skids?

Moi! Moi! Moi! is the refrain from France's neighbours in the European Union. For even as Paris reeks of tear gas, ideas promoted by French officialdom for decades have become ascendant in EU circles. Particularly on economic matters, French thinking is being copy-pasted into statute books in Brussels. France may be running out of money, political stability and public patience; it is not running out of influence. A country that plenty think ought to serve as a cautionary tale is instead being treated as a blueprint. Call it the paradox of Parisian power: even as French politicians lose the ability to govern at home, they are tightening their ideological grip on Europe.

Brussels was once a place where France's instincts for state intervention collided with Germany's faith in markets and (relatively) free trade—and usually lost. The EU's institutions have long had a liberal bent that blunted France's big-state, *dirigiste* preferences. The club's rules prevented national governments from meddling in industrial matters by doling out money to favoured firms and so forth. (The French got generous farming subsidies in return.) Far from protecting national champions, the EU was usually minded to let domestic firms face competition from both within the bloc and outside. Parisian policymakers fumed at the hemming-in of the state's capacity to *do something*. From the outset of his presidency a decade ago, Emmanuel Macron warned it

was resulting in Europe losing its “strategic autonomy”—broadly, the ability for the continent to act independently in a world increasingly dominated by America and China. Many in the club dismissed this as a bit of Gallic eccentricity, along with the penchant for *escargots* and taking August off.

No longer. These days French-infused scepticism of globalisation and unfettered markets is close to being orthodoxy. Those EU rules preventing public money from being showered onto national champions are all but forgotten: subsidies once considered evidence of economic illiteracy (including by this newspaper, often) are now presented as proof of strategic sophistication. “Industrial policy” has gone from taboo to mainstream. The French idea that Europe has been naive—practising economic self-restraint while America and China brazenly pursue economic self-interest—is now commonplace. Free trade is still tolerated, but only insofar as it does not interfere with broader aims of Europe recouping some measure of economic sovereignty.

How did French ideas triumph, even as France has seemingly gone off the rails? In part, because what once looked like Parisian paranoia has come to seem like foresight. Many in the EU sniggered when Mr Macron in 2019 warned in an interview with *The Economist* that Europe risked being “no longer in control of its destiny”. Events proved him right. Covid-19 made globe-spanning supply chains spawned by free-trade evangelists seem less clever to some. Russia's invasion of Ukraine in 2022 underscored how relying on imports—in this case, of natural gas—brought with it unwanted dependencies (of the sort China went on to exploit with niche raw materials). And maybe, just maybe, generations of French presidents had been right to warn that America might one day prove an unreliable guarantor of European security.

Internal dynamics in the union have helped France's cause, too. Brexit deprived the EU of a power whose *raison d'être* was to resist Gallic-infused thinking in Brussels. More recently Germany has made a startling pivot to support French economic interventionism, finding free trade much less appealing as Chinese firms started competing effectively with its own carmakers. Consider a slew of “Made in Europe” plans put forward by the EU's industry commissioner, Stéphane Séjourné, a Frenchman close to Mr Macron. They advocate earmarking public spending for EU firms. Such protectionism would once have been dismissed out of hand by officials in Berlin. Now they merely want to make sure at least some allies such as Britain and Canada are included in an expanded definition of Europe. The aim is to water down French plans, not thwart them.

The Gaul of it all

For those Europeans already uneasy about importing France's Colbertist instincts, there is a more unsettling thought: Mr Macron may prove the moderate version of France's attempt to remake the EU. Marine Le Pen, the populist currently leading the polls, would seek to recast the EU along more nationalist lines.

Will adopting French ideas end up hobbling Europe, as it seemingly has France? Not necessarily. There is a difference between a state that intervenes strategically and one that spends indiscriminately. France's predicament offers lessons in both. Mr Macron was right to warn that Europe needs greater autonomy from foreign foes. But a country that cannot control its own finances has precious little autonomy either. France got the diagnosis right. It is a pity it made such a mess of the treatment. ■

Britain



Fiscal maths

Magical thinking at the Treasury

Britain's upcoming budget will feed the delusion that its welfare state is sustainable

ONE OF THE great fantasies of British politics is that the country can sustain a welfare state similar to today's without raising taxes. It looks as if John Healey will be the latest chancellor to peddle this fiction, at his budget on October 28th. Taxes account for 32% of the cost to employ an average single Briton, three percentage points less than the rich-world average. Yet in return citizens expect a full-service welfare state, including free health care and universal pensions. Successive governments this century have funded this jammy deal only by taxing high earners hard, skimping on defence, letting public services deteriorate—and borrowing a fortune.

This strategy is running out of road. Poor growth and an ageing population, combined with increasing geopolitical turmoil, are stretching the public finances far too close to breaking point. Failure to reckon

with these realities has given Britain's past few budgets an air of perpetual crisis, with one chancellor after another scrambling to make up perennial shortfalls. Mr Healey's budget is shaping up to be a classic of the genre, fiddling with small tax rises when in fact the whole system is flawed. Difficult decisions seem set to be postponed until a spending review next year.

The backdrop is bleak. Britain's ten-

year borrowing cost has risen to 5.4%, from 4.4% at the latest forecast by the Office for Budget Responsibility (OBR) in March. That is partly because the Iran war has raised energy prices, but many other factors—from outsize government borrowing to surging global demand for capital—mean bond yields are unlikely to fall soon. The Resolution Foundation, a think-tank, reckons the government will need to spend £14bn (\$19bn, or 0.4% of GDP) more on debt interest in the fiscal year to 2030 than previously assumed.

Mr Healey has signed up to fiscal rules ensuring day-to-day spending is fully covered by taxes in three years' time, with debt also falling as a percentage of GDP by then. In March he was forecast to follow these rules with £24bn to spare, but the Resolution Foundation reckons only £12bn remains. (Other forecasts are sunnier.)

The chancellor has also said his budget will maintain a financial "buffer against uncertainty" and give people a "bit of breathing space". This suggests he will dispense help with the cost of living, through targeted subsidies for energy bills, for instance, or by postponing a planned rise in fuel duty. Depending on his exact choices, expect taxes to rise modestly by 2030, probably via small-ish measures such as ►►

→ ALSO IN THIS SECTION

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► higher levies on banks or gamblers.

A low-drama budget would be no disaster. If Mr Healey stuck to plans made by his predecessor, Rachel Reeves, in March, the deficit would fall from 4.4% of GDP in the past fiscal year to 1.8% by 2030. France, in contrast, is on track to run a deficit of 5.4% of GDP in 2026, having aimed for 5%.

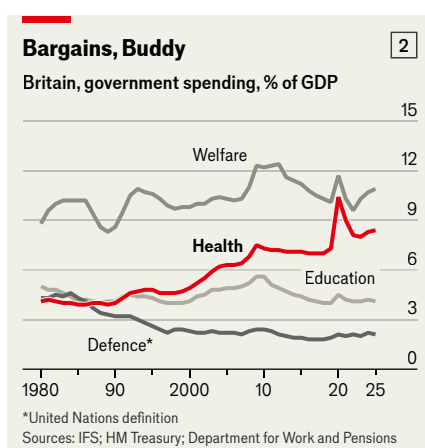
But Britain should try to do more than beat the French, and abiding by the letter of the fiscal rules does not mean its public finances are in good repair. The rules themselves are eyebrow-raisingly loose, never requiring deficits or debts to actually fall. They need only be forecast to fall in three to five years—so the Treasury can always dodge hard choices by promising restraint that then fails to arrive (see chart 1). This looks likely to happen again: plans rely on real-terms cuts to many departments' budgets that few expect to happen.

And so Britain's debt is like a ratchet, jumping up at every crisis and never coming back down by much. Debt, excluding the Bank of England's balance sheet, is now 92% of GDP, up from 76% before the covid-19 pandemic and 36% before the financial crisis of 2007-09. Higher bond yields have made servicing this debt painful. The government's annual interest bill has more than doubled since the pandemic, to £109bn. That is 8% of government spending, more than the entire defence budget. When crisis next strikes, therefore, Britain may struggle to borrow its way out.

Physician...

The country's failure to pay off its debts stems from a mismatch between the state Britons want and the taxes they are willing to pay. Government spending will constitute 45% of GDP in the fiscal year to 2027, up from 39% before covid. The Institute for Fiscal Studies (IFS), a think-tank, points out that the last time public spending was sustained at such a high level was during the second world war.

The biggest culprit is the National



Health Service. The state forks out 8.4% of GDP on health care, up from 4.9% in 2000 (see chart 2). As the population ages, and as the sector's productivity lags behind the wider economy's, this share will climb. The OBR reckons that health-care spending could reach 13% of GDP by the 2070s.

A growing cohort of geriatrics also needs food, accommodation and social care. In July the OBR thought spending on the state pension alone could rise from 5% of GDP by 2031 to 9% by the 2070s. Andy Burnham, the prime minister, has since said he will tweak the "triple lock", which raises the state pension each year, to make it slightly less generous after 2030. But any savings will be swallowed by his plans for a new National Care Service.

Britain used to pay for its welfare state by spending less on defence. Threats from Russia and China mean that is no longer an option. The government has pledged to spend 3.5% of GDP on defence by 2035, up from 2.7% in the fiscal year to 2028. In total, the OBR thinks that government spending excluding interest payments could rise from 40% of GDP in 2030 to 49% by the 2070s. If revenues stayed constant, Britain's debt would balloon (see chart 3).

Should an imminent debt crisis loom, the government would take action. But the incentive to move early is weak because no one knows when this might happen. A growth spurt, perhaps fuelled by artificial intelligence, may postpone the reckoning (though it would probably also raise borrowing costs). The ageing of Britain's population nevertheless means a reckoning is coming. When it does, one option would be drastic cuts to spending: reducing the state pension, say, or tightening eligibility for disability benefits. A brave government might even start charging patients to book a doctor's appointment.

The alternative is rethinking the tax system. Since coming to power in 2024 Labour has been constrained by its foolish manifesto pledge not to increase income tax, national insurance, value-added tax (VAT) or corporation tax. These account for

over 70% of tax revenue. Labour has already broken its promise, notably by raising the national insurance paid by employers. The total tax take is forecast to be 38% of GDP by 2030, the highest since the 1940s.

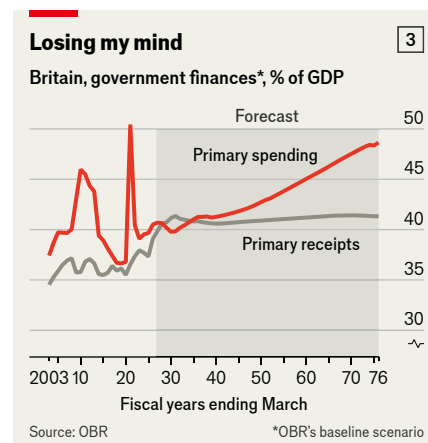
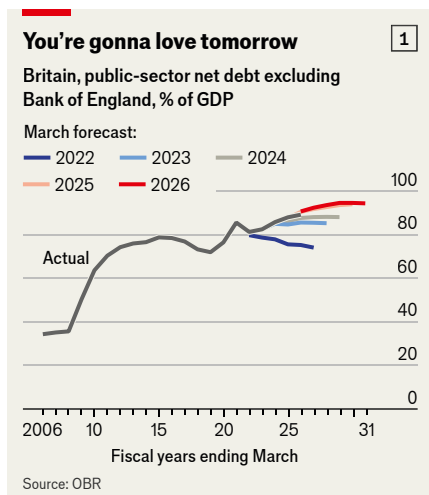
Mr Healey will be loth to break Labour's manifesto pledge again. But if his party does not want to cut long-term spending it will have to reconsider how the government raises revenue. Some cash could come from higher taxes on the rich. The chancellor could, say, rejig capital-gains tax to skim more from unusually high investment returns. For now, however, he has reportedly rejected calls from some Labour MPs to raise capital-gains tax.

In any case, higher levies on wealth would not fund the sort of welfare state Britons have become accustomed to. For that, politicians and voters would have to accept that broad swathes of society need to start contributing more. This could involve ditching the list of products, such as many clothing and food products, which are exempt from VAT. Altogether, these exemptions cost the state £70bn a year. Or the government could raise the level of income tax paid by low and middle earners.

...Healey thyself

None of these options is politically appealing. But Britain's fiscal reckoning might come sooner rather than later. Next year's spending review will set departmental budgets for at least the following three. Earlier this year, when Mr Healey was defence secretary, he said it was crucial for defence spending to rise to 3% of GDP by 2030. He then resigned when the Treasury refused. The IFS reckons that meeting this target, while raising health-care spending and avoiding other real-terms cuts, would cost an extra £35bn a year by 2030.

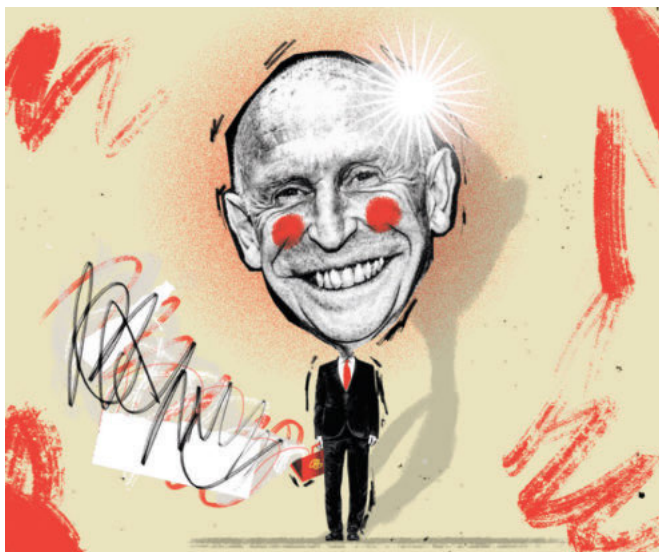
To grasp the scale of this cost, consider that funding it would be equivalent to raising the basic rate of income tax from 20% to about 24%. If—as looks likely—Mr Healey instead fiddles at the edges on October 28th, he may get away with it for a while. Eventually, though, the bill will fall due. ■



BAGEHOT

Meet John Healey, Britain's bald fraud

As his upcoming budget will show, the chancellor is out of his depth



BALD MEN ruled football in 2024. That year four of the big six managers in the Premier League had heads that gleamed like the trophies they won. A moniker was coined that is now beloved by football fans: the “bald fraud”. This charlatan is someone whose actions have little to do with their team’s performance on the pitch and who will, eventually and inevitably, be found out.

Bald dominance of football has since ended; the bald era of Britain’s public finances, however, is just beginning. In July John Healey, the new-ish chancellor and proud slaphead, greeted Treasury officials by noting familiar faces from his previous stint there in the 2000s. “Perhaps a little older, a little wiser, a little greyer,” he said. “Me, I’m still bald.” But what if Mr Healey is something worse? What if he is a bald fraud?

While accusations of bald fraudulence in football are made publicly, in Westminster they are private. “Pedestrian”, say the kinder ones who have worked with Mr Healey. “Slow”, say the meaner ones. Visibly out of his depth, remarks a veteran of Sir Keir Starmer’s era. Ministers do not pay Mr Healey much heed. What is the chancellor’s theory of growth? Who knows, replies one. Should they bother to find out? The chancellor has little influence on growth policy, shrugs a member of the cabinet. The caucus crying “bald fraud” is large.

Bald he may be but a fraud he is not, say others. “He’s got views!” says one MP, delightedly. After two frustrating years in power, Labour sets the bar low. Under Sir Keir, ministers treated their boss like a constitutional monarch, sitting mute while others ran the country for him. By contrast Mr Healey and Andy Burnham, Sir Keir’s successor, have politics. It is a parochial politics, focused on regional growth and hand-outs rather than the coming demise of the welfare state, but it is a politics nonetheless.

Gauging fraudulence is more art than science, in both football and politics. Some labelled bald frauds are nothing of the sort; others are lucky to be there at all. Often people decide based on trivia and vibes. Did you know Mr Healey came *second* among Labour MPs when they voted for their shadow cabinet in 2010? The man has been around. He was first elected in 1997, becoming a Treasury minister when Gordon Brown was chancellor. Come

2024, this was executive manna to a party about to seize power with almost no governing experience. Mr Healey found himself as defence secretary, in the same way Sir Alex Ferguson’s former players were granted plum jobs even if they had achieved little. “Get Healey in. He knows the club.”

Pretty much everyone in top-flight football has won something, just as a senior politician has usually done a big job somewhere. How difficult is it to win the Eredivisie, the Dutch premier league, really? Some roles can make anyone look good. Is secretary of defence a real job? After all, the bulk of it comes down to asking the Treasury for money and then, if it refuses, sending uniformed generals to march up Downing Street and beg.

What being defence secretary does provide is instant gravitas. Sometimes appearance is all it takes. In *30 Rock*, a sitcom about a television channel, one character ranted: “The television audience doesn’t want your elitist, east coast, alternative, intellectual, left-wing—” The recipient cut in: “Jack, just say Jewish, this is taking forever.” And so it was when Labour was casting around for a potential caretaker prime minister should Sir Keir have to quit. Mr Healey was tipped for it by senior party wallahs: steady, solid, looked the part. Just say “bald”, this is taking forever.

Asking for money and not getting it is Mr Healey’s main achievement in politics. His defining moment as defence secretary came when he left, resigning over Sir Keir’s refusal to raise defence spending to 3% by 2030. Mr Healey, hitherto known for resolute loyalty, called for the prime minister to go. It worked. Sir Keir left and Mr Healey landed the second-biggest job in government.

In football as in politics, frauds are exposed only once they climb high enough. The Peter principle—that everyone is promoted one level beyond their competence—is an iron law. After all, Mr Healey became chancellor because of who he was not. Shabana Mahmood was too useful as home secretary; Ed Miliband, now the foreign secretary, was too alternative, intellectual and left-wing. Mr Healey resembles a hapless coach at a club whose megalomaniac chairman picks the team each week.

Even a bald fraud can prosper for a while. Some budgets mark sea changes; the one on October 28th will not, unless something goes badly wrong. Some money for defence will be found and lip service will be paid to growth. Should it go without a hitch, plaudits will come in anyway: “steady”, “solid”, “he looked the part”.

But in 2027 Mr Healey will have to cobble together the best part of £35bn (\$47bn, or 1.1% of GDP) if he wishes to avoid steep cuts for a swathe of departments including for local government and prisons, according to the Institute for Fiscal Studies, a think-tank. Anyone can manage a spending review when the economy is growing by 3% a year, in the same way any bald fraud can manage Bayern Munich, Germany’s richest club, and win the Bundesliga. Could they do it on a cold, wet night in Stoke? Can Mr Healey do it in a spring statement in April?

Bald strategy

If a football team can thrive with a bald fraud at the helm, so can the British economy. The data are more hopeful than the vibes suggest; should the Strait of Hormuz fully reopen, they would be glowing. Whether Labour can hang on to power will be decided outside the chancellor’s office—in 10 Downing Street or far beyond. Should it fail, the next government will face the same fundamental questions. Andrew Griffith, another bald man, is the Conservatives’ new shadow chancellor. The debate can start again. ■

International



What backlash?

The surprising popularity of AI

BEIJING, MUMBAI, SÃO PAULO AND SEOUL

Unlike rich Westerners, many around the world feel hopeful about the technology

AS A BOY growing up in the aftermath of the Korean war, Bae Oh-do would venture out into the forest to gather firewood to heat his family's home. "The manual era is completely ingrained in me," says the 70-year-old violin salesman, sitting under a tree in a park in Seoul's Jong-no district. He recalls having to use a foot-operated "treadle pump" to get water, as well as his delight when the first tractors rolled into the South Korean countryside.

In recent decades he has seen things "develop so conveniently", with the internet and smartphones. And what about artificial intelligence? "It's nothing for humans to worry about. This kind of thing is good," he says. "They should keep developing the technology. Humanity has advanced so much up to our generation. There's no telling how the world will change."

Read the headlines in Western media

and it may seem as though a backlash to AI is spreading fast everywhere. But so far, it is not. Mr Bae's sunny disposition about AI is shared by almost two-thirds of South Koreans, according to a survey that GlobeScan, a polling firm, conducted for *The Economist*. Outside rich countries this good feeling is even more strongly shared: nearly nine in ten people in Nigeria and Vietnam, for example, said that AI will improve not only their own lives, but the lot of humanity (see chart on next page).

The polling across 34 countries was carried out online, which could tilt attitudes in favour of AI. Yet in the same survey sentiment in rich Western countries was much

gloomier. In America, Canada and France more people felt negatively than positively about AI's future impact on humanity. In other Western countries sentiment was net-positive, but far less so than in the poor world. Another recent survey of 37 countries, carried out by Gallup with Microsoft, returned similar results: AI is broadly popular, but less so in rich Western countries.

Why the gap between the West and the rest? Some of the optimism may cool as more people in poor countries come into direct contact with AI or data centres, and see the technology helping or hurting some more than others. Around 9% of working-age Kenyans used AI in the second quarter of 2026, according to a study by Microsoft. Yet 85% told GlobeScan that it would change their lives for the better.

But plenty of people, poor and rich alike, are already at least vaguely conscious of AI's pitfalls. In a survey by Pew Research Centre, South Koreans were most likely (along with Australians) to say they expect AI to generate massive job losses and worsen inequality. For now, though, such fears appear to be outweighed by intrigue about the technology's promise.

Part of the explanation is that many workers outside the richest countries have less to lose from AI than do their counter- ➤

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► parts in the West. In much of the poor world work is often informal and, compared with jobs in the West, precarious. The notion of losing a secure office job to technology is more of a rich-world problem (though in India, say, information-technology and other back-office workers look vulnerable to disruption).

The poor world has much to gain from AI, too. In countries where institutions and formal education can be lacking, AI helps some people help themselves. “Pessimism is a privilege for those who can afford to despair,” argues Payal Arora, author of “From Pessimism to Promise”, a book about diverging attitudes to technology.

DeepSeek and ye shall find

In India users have gained cheap or free access to apps like Gemini from Google or ChatGPT from OpenAI; nearly one in five working-age Indians used generative AI in the second quarter of 2026, compared with a third of Americans, according to a recent Microsoft study. DeepSeek, a free Chinese alternative, is popular in Africa, where Microsoft estimates that in many countries about one in ten working-age people used generative AI in the second quarter.

A narrow street in a busy suburb of Mumbai illustrates the benefits. Many shops on it use ChatGPT to generate advertisements. Dinesh Chandra, an optician, asked the chatbot to produce a “gravity-defying” photo for his brand. It duly created an image, now printed on brochures, of glasses floating above clouds while riding a feather. Next door Omkar Sapre, who sells dried fruit, masalas and pickles, posts “beautiful pictures” from ChatGPT on Instagram and WhatsApp, and has noticed his sales pick up. Ashlesha, who works at a dry cleaner on the same street, says, “We work hard and AI is extra support for us. Everyone is on Instagram.”

All of them love the convenience of using AI; none worry about safety, privacy or data leaks, much less “AI slop”. The shaming of AI content seems less common outside America and Europe. Westerners “have historically monopolised knowledge and ideational production, but AI challenges that,” says Yuen Yuen Ang of Johns Hopkins University. “Is it a crisis only for those who lose from disruption?”

As Mr Bae illustrates, even in some rich and middle-income countries where there seems more to lose from disruption, AI is surprisingly popular. Singaporeans are among the world’s top AI users, says Microsoft; nearly two-thirds told GlobeScan they thought the technology would have a positive effect on their lives. In Malaysia, which is experiencing a big data-centre boom, minor protests against the sites have not yet turned into a wider backlash.

Some countries where AI-optimism runs high share common factors that seem

to cut across socioeconomic lines. One is a looming shortage of workers. Parts of the world that have long had low fertility rates, like East Asia, are ageing rapidly. Many hope that AI (and AI-powered robots) can fill in for workers who do not exist, helping countries to care for greying populations.

Another feature of some AI-optimist countries is a living memory of technology radically transforming societies in the span of a lifetime. Singapore, South Korea and Taiwan went from poor to rich partly by rapidly adopting new technologies that originated abroad.

In China and India technological leaps, including through digital payment and delivery apps, have brought extraordinary convenience and autonomy. “At our age, we’ve lived through countless changes,” says Ms Meng, who works in advertising in Beijing and who, at 40, feels ancient. “Things haven’t even settled in China before another huge shift comes two or three years later.” In India smartphones have offered hundreds of millions of people a “God in their hand” over the course of just a few years, says Ms Arora.

In Western countries, by contrast, pessimism towards AI may reflect people’s perception that their lives are not getting much better, that AI could make their lives worse—and that politicians cannot be relied upon to protect their interests. Daniel Dobrygowski, author of the book “Technology Governance”, argues that this attitude is coloured by people’s experience of social media and Big Tech, which Western governments have struggled to rein in.

The ways in which politicians and firms talk about AI may also make a difference. Bosses of American labs warn of job losses

and human extinction as they race towards “artificial general intelligence”. Asian politicians and tech bosses rarely talk like that, perhaps in part because they are not developing frontier capabilities of their own. Instead they tend to focus on the practical uses of AI—what they will do with the technology, rather than what it will do to them. You are unlikely to hear the boss of Samsung talking publicly about AI doom.

In China, where big advances in AI are being made, officials do worry about risks, from cyber-security threats to economic dislocation (see Chaguan). But the general tenor of state media is boosterish.

It would be wrong to conclude, though, that people in more AI-positive countries have no worries at all. Some are more resigned to the advance of technology as a fate that cannot be avoided. “AI’s impact might be different from every previous shift. But the Earth has its own rhythms,” says Ms Meng in Beijing. “When it’s not meant for you to survive, you won’t. You can’t live every day worrying, right?”

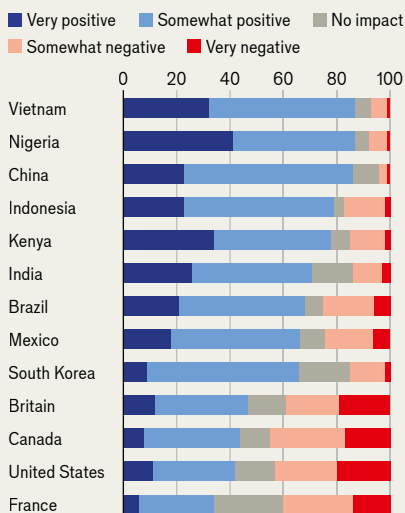
Cho Kyu-jin of Seoul National University reckons that South Koreans are embracing AI despite their concerns because the “fear of being left behind is higher than that of losing stability”. Kim Ah-ran, a 40-year-old labour lawyer, says, “When changes came in the Industrial Revolution, there were positive and negative effects. We’ll find a way to live.” Her young son, standing next to her at the Galaxy Robot Park outside Seoul, is mimicking a humanoid that is practising Muay Thai moves, while clutching a workbook that explains how to use AI to code such robots.

Such pragmatic acceptance suggests that positive attitudes like Mr Bae’s could yet be fragile. Kim Jeong-nam of KAIST, a tech-focused university, serves on South Korea’s Presidential Council on National Artificial Intelligence Strategy. He thinks that South Koreans’ tolerance is conditional on “competently built” policy. If AI starts to “produce visible losers”, such as in exam fairness or jobs, he worries that leeway could vanish. The same could hold true elsewhere. “How are you going to invent an AI that can drive a motorbike?” asks Anderson Santos, a delivery driver in São Paulo, Brazil, who is later dismayed at a mention of driverless cars.

There are some nascent signs of data-centre backlash in other parts of the world, too, if nothing like the outright rebellion seen in many parts of America. In the Philippines people are marching against “Pax Silica”, an American-led initiative to develop AI and semiconductor supply chains. In Thane, a city near Mumbai, hundreds have protested against an Amazon hyperscale data centre that is planned for their neighbourhood. Rage is not yet all-consuming, though. “It’s just like any other factory,” says one resident. “AI is the future.” ■

Welcoming our new overlords

“Overall, do you think AI will have a positive or negative impact on humanity as a whole?”
September 2026, % responding*

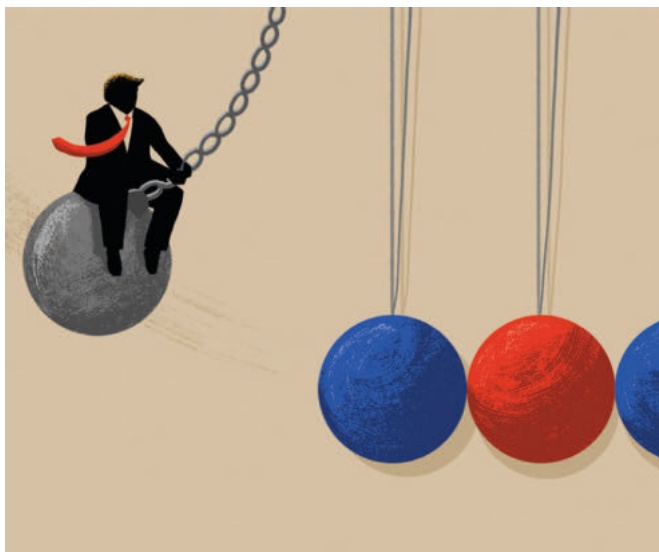


Sources: GlobeScan; The Economist *Survey conducted online

THE TELEGRAM

Donald Trump, human wrecking-ball

The world mostly loathes Trumpian foreign policy. The next president may offer less change than foreigners hope



"INEVER MEANT to start a war...I just closed my eyes and I swung," sings Miley Cyrus in "Wrecking Ball", a break-up ballad that seemed to play on every American radio in 2013. Though melodically a bit relentless, the pop song deserves a revival as a guide to the second-term statecraft of President Donald Trump.

It is clear that traditional foreign-policy theories are a poor guide to Mr Trump. That offers both risks and opportunities to anyone running to be America's next president.

This newspaper has noted Mr Trump's wrecking-ball tendencies before, but in the two years before the next presidential election his yen for demolition has a specific impact. It has broken the "pendulum theory", a once-reliable tool for predicting American foreign policy. Going back to Richard Nixon and his successor Jimmy Carter, most presidents have (over-)corrected for the biggest flaws of the guy who came before. In reaction to Tricky Dick's devious realpolitik, the Carter presidency offered hairshirt moralising. Before long, voters felt that America was disrespected and chose can-do Reaganite optimism. When Americans wearied of George H.W. Bush, a wise but stiff statesman, they elected feel-your-pain Bill Clinton. After shoot-from-the-hip George W. Bush, Americans fell for cool, cerebral Barack Obama, before souring on haughty brainiacs and betting the country on Mr Trump.

Today the theory is less use, because Mr Trump swings every which way. When bullying Ukraine to settle with Russia, he is a might-makes-right realist. In Venezuela his rule-by-proxy would impress a 19th-century imperialist. In the Middle East he scorned regime change right up until his bungled war to bend Iran to his will. He declares that communism menaces America, but calls China's party boss, Xi Jinping, his friend. The one constant is an impulse to smash the status quo. Cue mental images of Mr Trump atop a demolition ball (hopefully, unlike Ms Cyrus's music video, the 80-year-old is wearing more than Dr. Martens boots).

It is quite plausible that this president will be hooted from office after wrecking America's good name (though AI dominance could create riches and clout). Successors wishing to do the opposite will be spoiled for choice. For the foreign-policy pendulum to swing through a full arc, the 48th president could put the national

interest ahead of personal profit. Alternatively his successor could avoid reckless wars and shun regime change. The next administration could work to rebuild alliances, pledging to help Europe confront Russia and friends in Asia deter China. All these options would break with some version of Trumpism.

The range of options is especially wide for Democrats. Whether Mr Trump's vice-president, J.D. Vance, clears the field or faces a contested primary, Republicans will be wary of angering the MAGA faithful by repudiating Mr Trump.

Because Democrats are a self-indulgent bunch and—for a political party—surprisingly bad at politics, they are responding to this moment of opportunity with a navel-gazing argument. Conversations with foreign-policy heavy-hitters in Washington describe two broad camps, one centrist and one on the progressive left. These agree that voters care most about domestic and economic issues: there is much talk of heeding the kitchen-table concerns of working families. Yet each camp knows, too, that the outside world has a habit of intruding.

Responding to demand, delegations of Democratic thinkers and former officials have begun meeting foreign governments and politicians. One such group, involving both moderate and leftist Democrats, visited Brussels, London and Paris this month. A consistent message from these envoys is that the old post-1945 order is not coming back, and that some pillars of Trumpism—rhetoric about putting Americans first, and a focus on industrial production—will remain, whoever wins.

Trump-era tariffs are divisive. Polls suggest that voters blame them for high prices. Centrist Democrats cannot decide, though, whether it is better to juice the economy by scrapping most import taxes on taking office, or keep them temporarily as leverage over trade partners. The left believes in protected favoured industries (which will lobby to keep trade barriers) and likes tariff revenues.

A loud group would bar from future service those Biden-era officials who worked on Israel policy, deeming them steeped in Gazan blood. A cross-party consensus exists to deny Israel uncritical support. Some on the left would pull America out of the Middle East and offer only cautious support for Ukraine.

America First, now and always

China sparks sharp disputes. Centrists believe that America is in an epochal contest with China for global leadership in technology and the world order. Prominent leftists call that overblown and hope to work with China on climate change and other global challenges. Some, ludicrously, imagine China will permit its workers to ally with America's to agree on global minimum wages. Unfortunately for such China dreamers, their growing anxiety about AI safety and the power of big tech leads in another direction. Politically no Democrat can safely call for the slowing of American AI firms without calling for their Chinese rivals to be held back, too. That would involve imposing export controls on high-end computer chips and tools to make them, which would enrage China.

In some fields Democrats can break with Mr Trump while offering elements of continuity. Shrewd Democrats can keep tough border controls, which voters like, but promise less cruel enforcement of immigration laws inside America and a warmer welcome for legal migrants. His proposed defence budgets are so large that hawkish Democrats can spend less without much fear of seeming weak. Disruptive, unknowable change is coming: the thing to know about wrecking balls is that they are erratic. ■

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The woman spoke in a whisper. “You’re the doctor. I know you.” Adam could barely hear her over the babble of the other captives. Militiamen had seized them as they fled the slaughter; now they were trapped in a disused school on the edge of the Sudanese desert. The woman was one of the locals let in to sell peanuts.

Until she spoke, Adam had been in a kind of trance. When the city fell in October 2025, he was already weak from the months-long siege. All he’d been given to eat in the two weeks since were a few mouthfuls of flatbread a day. As his body shut down, the past and present blurred. He day-dreamed about the last days of el-Fasher: joking with friends at the hospital; his dog, Bulldoze, padding behind him as he walked through the wards; the screams when the militia finally overran the city’s defences.

The woman leaned closer, her headscarf slipping forwards. “You’re the doctor,” she repeated. “From Saudi hospital.”

Suddenly Adam was alert. Fighters from the Rapid Support Forces (RSF), the militia that had captured him, were hunting down doctors. Hospital staff had

LAST SHIFT IN EL-FASHER

By the time a genocidal militia stormed one of Sudan’s biggest cities, most doctors had fled. Adam kept doing the rounds. Katharine Houreld and Hafiz Haroun tell his story

Adam, after a long shift in the Saudi hospital’s operating room

evidence of the atrocities they had committed since they began fighting the Sudanese army in 2023; some doctors, like Adam, had spoken publicly about them.

When Adam was first taken captive on the road out of el-Fasher, he'd been held under the scorching sun with thousands of others, and had watched RSF fighters search the crowds for people they considered enemies. They grabbed prisoners at random and shouted, "Where are the soldiers? Where are the doctors?" as they punched and kicked.

The gunmen offered to let people go free if they informed on wanted men. Sometimes they snatched captives' phones and searched them for incriminating material. Adam, who had left his phone at the hospital and shaved off his beard, managed to avoid discovery. Others weren't so lucky. Several times he saw a fighter pull a man from the crowd and drag him behind the nearby trees. After a burst of shots, the fighter would come back alone.

For all he knew the woman before him could be an RSF informant. "Sorry, you're mistaken," he told her politely. She moved on.

A few days later she was back. She asked him again if he was the doctor, and he denied it a second time. He wasn't sure he should have. He needed a friend. The only way out seemed to be to get a family member to pay a ransom to the RSF, but Adam had no way of contacting anyone.

In theory he could have escaped, as the school wasn't heavily guarded. But the desert sands stretched all around him; he'd die of thirst without help. Someone might have mercy on him if he ran into the nearby village. But they might also report him to the RSF.

Later, the woman tried a third time. "I know you," she insisted. "You helped my sister."

Adam thought about his parents, who had escaped to safety, and his friends. He longed to see them again. With a deep sigh, he commended his life to God and leaned in close.

"Yes," he admitted. "I'm the doctor."

RSF forces stormed el-Fasher on October 26th 2025, briefly putting Sudan's civil war on front pages. Humanitarians and diplomats had been warning for months that the RSF's capture of the city, the last stronghold of the Sudanese army in the Darfur region, would lead to a bloodbath.

The events that followed were only sparsely documented. Internet and phone signals were down, and those who survived often had their phones stolen. Researchers relied on satellite imagery to quantify the scale of the killing. The UN later concluded that it bore the "hallmarks of a genocide". A year after its fall to the RSF, investigators are still working out how a city that once housed a million people was emptied. El-Fasher has yet to gain the name recognition of other sites of modern-day massacres, such as Srebrenica.

Adam had a happy childhood there, even during the previous civil war. A rebellion in Darfur broke out in 2003 when Adam was six, the result of decades of neglect by the corrupt, authoritarian government in Khartoum. When armed rebels, drawn from the region's African ethnic groups, attacked military bases, the Arab-dominated regime in the capital retaliated against the rebels' communities. Warplanes bombed villages, burning families alive. The Janjaweed, a feared Arab militia, were sent in. They looted, gang-raped women, and bludgeoned children to death.

Gunmen offered to let people go free if they informed on wanted men

The hospital pharmacy after a strike in which one of the staff was killed. The operating theatre. Sandbags reinforcing the hospital walls (left to right)

But these horrors impinged only tangentially on Adam's life in el-Fasher. For centuries, the city had been a hub on trans-Saharan caravan routes linking north, central and east Africa, and it retained its cosmopolitan roots. Children from different African ethnic groups as well as pupils with Arab roots studied together at Adam's primary school. His classmates sometimes relayed gossip they'd overheard about bands of marauders in the countryside, but Adam was more interested in talking about football and anime series, like "Detective Conan".

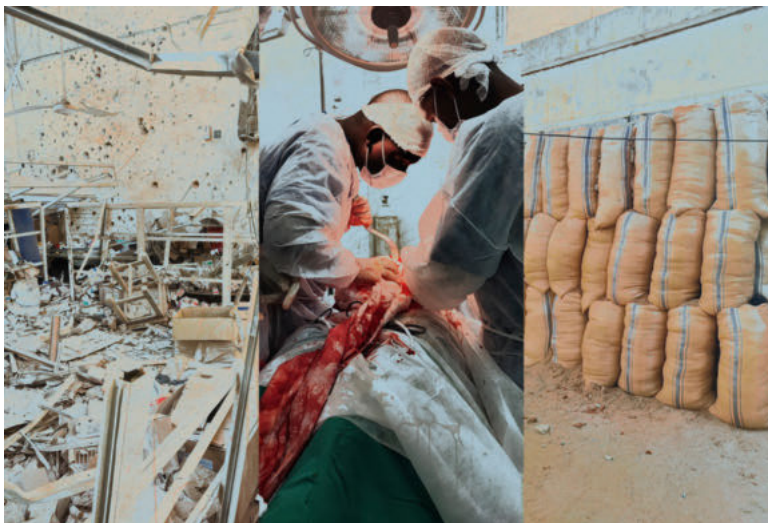
Eventually a series of truces, together with the deployment of an armed peacekeeping force, tamped down the violence in Darfur. As Adam got older, he noticed things he'd overlooked as a young child: the refugee camp on the edge of the city; the portraits of the president, Omar al-Bashir, looking down from the walls of shops; the fact that no one would talk about politics in south Darfur.

For him and his family at least, life was good. His parents both had decent jobs, and he and his two sisters grew up in a spacious house with a garden. Even as a child, Adam knew that he wanted to help people, so he studied hard in science in the hope of one day becoming a doctor.

On special occasions, the family went out for dinner at shisha bars illuminated by lights strung between the trees like glowing cobwebs. Sometimes Adam's father took him for coffee in el-Fasher's main market, where the shops glittered with bangles made from gold mined in south Darfur.

By the time Adam started studying medicine at el-Fasher university in 2014, the economy was crumbling. The Bashir regime's dysfunction had helped create a surge in food and fuel prices. Critics were disappearing. Protesters around the country began demanding Bashir's resignation; Adam helped organise demonstrations at the university. He and his fellow students were teargassed, beaten and sometimes jailed. In April 2019, after months of popular revolt, Bashir's security chiefs forced him to step down.

A fledgling transitional government took charge with the backing of the two main powerbrokers in the country: the Sudanese army and the RSF, the official paramilitary organisation that had emerged from the Janjaweed. For the first time in Adam's life, peace and democracy seemed within reach. Adam and his fellow





students would stay up late chatting about their dreams for a new country.

Then in 2021, the army and the RSF overthrew the civilian government in a coup. Adam was deep in his studies by then, and struggled to juggle exam preparation with participating in pro-democracy protests. Classes were often cancelled owing to the tumult. But eventually, towards the end of 2022, he graduated.

His proud father hosted a barbeque for their family and friends; guests sipped sweet, sticky glasses of ruby-red hibiscus juice while frankincense smoke curled through the evening air. Afterwards Adam and the other graduates zoomed around town, cheering loudly and hooting their car horns.

The next week he started work at el-Fasher's teaching hospital. Later, he'd marvel at how cosseted he was there. One of the hospital's 30 consultants was always there to give him advice. When he had to tell a young woman she had cancer, older staff counselled him on how to break the news gently.

On the morning of April 15th 2023 Adam was at home getting ready for a shift when his phone buzzed and he looked down. He didn't know it at the time, but it was the moment his old life ended.

Wassim, a 25-year-old laboratory technician who would later become one of Adam's closest friends, was at the teaching hospital when the news broke. He had recently graduated, and had brought his CV to the hospital seeking an internship.

People escaped to eastern Chad (top).

Abdel Fattah al-Burhan, the head of the Sudanese army, at the Flamingo marine base in Port Sudan in 2023 (bottom)

Adam ran to help with triage when someone yelled: "South hospital has been overrun by the RSF!"

As he waited he heard the crack of gunshots outside, but assumed it was just another protest being dispersed. Within half an hour, bloodied civilians began stumbling in. Hospital staff triaged them while shouting out the updates flashing on their phones. Gunmen were fighting near the military barracks a few streets away. The RSF and the army were at war.

Staff and patients fled the building. Two other hospitals caught up in the fighting also had to close. Along with other doctors, nurses and support staff, Adam made his way to South hospital, then the only one operating.

The next few days were chaos, with casualties piling up and the hospital stretched beyond its limits. Fortunately, the Sudanese are used to handling crises without any help from the state. The network of volunteers that had helped organise pro-democracy demonstrations became an emergency-response force: mending, scrubbing and scrounging for supplies to keep the hospital working. Wassim, his internship application long forgotten, joined in.

One of the most prominent figures in the network was Abdullah, a graduate in management studies. Abdullah and Adam were university friends, and had sometimes marched in the same protests. Abdullah's easy manner and confidence meant he was often called on to give speeches at community events, and he was well-known even before the war. Once it started, he got to work asking people for money and medicine on behalf of the hospital.

Sometimes there was a pretty young woman at the hospital, who caught Abdullah's attention. Aisha, an economics graduate, had been visiting an ailing relative when the war broke out and then pitched in to assist with the volunteer effort. She helped Abdullah look after a mentally ill man who had been injured, and later they distributed medicines together. Abdullah was drawn to her spirit and grit.

Adam, too, threw himself into the collective effort, sometimes joining Wassim for night-time raids on abandoned hospitals in search of supplies. He decided he was most needed at the Saudi maternity hospital (or "Saudi", as everyone called it), which had reopened two weeks after the start of the war. Other doctors and volunteers began splitting their time between Saudi and South.

For a few months it looked as though el-Fasher might be spared the worst of the conflict ravaging other parts of Sudan. The governor of Darfur, Minni Minnawi, was a former rebel leader. His fighters had been at war with both the Sudanese army and the RSF's predecessor, the Janjaweed, for years, and trusted neither. Shortly after the fighting broke out, Minnawi declared his forces' neutrality. Instead of becoming a battle site, el-Fasher was divided into zones of influence.

Minnawi's men held a buffer zone in the centre. The RSF held the east. The Sudanese Armed Forces (SAF) held the west and parts of the south, where South and Saudi hospitals were located. Like most people, Adam and Wassim knew fighters in all three groups. The city was tense, but it functioned.

Then in November 2023, Minnawi announced that he was going to fight alongside the Sudanese armed forces, citing RSF atrocities. Panic gripped el-Fasher. Families strapped bulging suitcases onto cars and fled. One night Saudi's senior medical director called Adam. They'd worked closely together, and he wanted to tell Adam himself that he was leaving.

Then came the kicker: he asked Adam to take over his responsibilities, alongside two other people. Saudi had a staff of 400, and was the only specialist maternity hospital in Darfur, a region of 12m people. Adam was ten months out of medical school.

That night he lay awake for hours, his mind churning. Would the older staff accept him? Where should he start? He began compiling lists of available staff in his head.

He awoke feeling calmer. There was no point trying to fake authority. He had to earn trust by being humble: cleaning the floors himself and leaning on his more experienced colleagues. Rather than make a big speech, he met staff individually. "You are the real leaders of the hospital," he told them.

He was particularly reliant on the hospital's middle-aged administrative director, Mahasin, who was a surrogate mother to the younger staff. She ticked them off over behaviour she considered risky, such as leaving the hospital for coffee or parties, and cooked up enormous vats of food for them.

The hospital was Adam's home now. He moved in with some essential belongings, including Bulldoze. A few months later fighting reached the neighbourhood where his family lived. His parents and sisters decided to flee, packing only a few bags of clothes and Adam's degree certificate. He escorted them to the city gates in the morning, hugged them, then went back to work. He found it hard to concentrate on anything until they called that evening to say they had made it out safely.

As the RSF seized town after town in Darfur, reports of atrocities mounted. Adam's mother begged him to flee himself. In November the RSF captured el-Geneina, a city 300km west of el-Fasher. Civilians from the tribes fighting the RSF were executed; some were tortured to death. Those who tried to escape were shot. If they did that to el-Geneina, his mother said, what did he think the RSF would do in el-Fasher, the centre of resistance?

After several of these entreaties, Adam snapped. He told his mother he was already dead. "Consider that I have given my life to this city," he said. "Consider me a martyr."

They spoke most days, but she never brought up the subject of him leaving again.

The war sometimes got to Adam. He took care to hide black moods from his colleagues. Often the only place he could find solitude was in the operating room, where he'd lean against the walls and brood in the antiseptic dark.

Small victories buoyed him, such as the time his team was able to save a baby who had been shot in its mother's womb. But the injuries were becoming worse as both sides' weapons got more powerful. When the war first broke out, Adam and his colleagues had mainly treated people for bullet wounds. But then both sides obtained more sophisticated equipment, including drones. Though the RSF tried to keep their foreign benefactors a secret, an overwhelming body of evidence pointed to the UAE (the UAE denies the accusation). By the summer of 2024, people were arriving at Saudi eviscerated, or with limbs sliced off.

One day in June 2024 about 50 wounded people arrived at Saudi within half an hour. Many were women and children with gaping shrapnel wounds. Adam ran to help with triage when someone yelled: "South hospital has been overrun by the RSF!"



Doctors at the Saudi hospital operate using light from their mobile phones. Fighters from the Rapid Support Forces, the militia that captured el-Fasher

He refused to believe it at first. So many of his friends were working there. Then he froze as he noticed how dirty and tired the new arrivals looked: they had run the 5km distance between the two hospitals. The rumour was true.

Over the next few days, staff from South hospital limped in. Many had scaled the hospital walls under fire to escape. Among them was the director-general of the facility, who had been beaten, stabbed in the face and left for dead.

The staff didn't know what happened after they fled, but they found out a few days later when a team was briefly able to re-enter. Some patients were shot in their beds; the bodies of their relatives lay sprawled in the lobby. A handful of survivors said the RSF had rounded up men of military age. Saudi was now the last functioning hospital in the city.

They got used to the sounds of drones overhead. The smaller ones whined; the bigger, military-grade ones sounded like small planes. Sometimes quadcopters hovered for hours, blades whirring, before releasing a bomb.

Adam managed to get hold of some shipping containers, and the team buried them to use as bomb shelters. But there were no sirens to alert them to attacks, and often people didn't make it to the shelter in time. Amna, a pharmacist with a penchant for romance novels who had joined them after escaping South hospital, was killed in a direct hit on Saudi's pharmacy.

"No one cared any more. You would hear a bomb hit the hospital and just shrug"

Soon Adam gave up trying to run to the shelter when the bombs fell. Ignoring Mahasin's scolding, he would enjoy his coffee in the sunshine instead, with Bulldoze by his side.

"No one cared any more," Adam recalled. "You would hear a bomb hit the hospital and just shrug."

Once a ward was hit in the middle of the night. Adam ran into the darkness, guided by screams. Then he heard a drone loitering above. Second strikes were common if there was a sign of life, so Adam couldn't switch on his torch. In the darkness, a young boy clutched his leg and begged him, "Uncle, save me!" But he couldn't help anyone without light. For hours, the screaming continued, then slowly subsided. Around 70 people died.

The hospital was targeted so often that the staff set up operating theatres and emergency rooms in abandoned buildings. But it didn't make them much safer: the drones just tracked the wounded to these secret outposts, and attacked them too.

In spite of the risks, hundreds of people—patients, doctors, staff from other hospitals and their families—moved into Saudi hospital. Nowhere in the city was safe; at least in Saudi they had each other. Room Three, where Adam and his friends lived, was the hospital's beating heart. It had only four beds, but more than a dozen people would crash there at a time.

People didn't come just to sleep. Room Three was where they went when they were feeling hopeless and alone. Room Three was life. "In Room Three someone was always dancing, someone was always singing," one surgeon told me later. "Someone was farting."

Room Three was also directly opposite Room Four, where some of the young female staff slept. Inhabitants of both rooms rolled out mats in the corridor between them, and chatted there over coffee and music. Sometimes they fell in love with each other: there was a spate of marriages between doctors, lab technicians, nurses and pharmacists.

The love story that gripped the hospital was that of the two volunteers: Abdullah and Aisha. Abdullah was a great favourite with the hospital staff, as was his mother, Zeinab, who cooked for them. When Aisha's family home was overrun by RSF fighters in 2024, she moved in with Zeinab. In January 2025 a stray bullet hit Zeinab in the chest. Before she died, she made Abdullah promise to take care of Aisha.

The men pooled their remaining cologne supplies and swapped bottles of Sauvage and Baccarat

Adam's dog Bulldoze.
A precious glass of hot chocolate.
Video games that helped doctors relax between shifts

Abdullah and Aisha married a few months later. At the ceremony Abdullah asked for a moment's silence for his mother. Everyone wept.

Then they threw a party in one of the damaged emergency rooms. Blue and purple balloons dangled from the walls and people danced to Sudanese love songs. The men threw their hands in the air while women sang along. "It was like there was no war," Adam said. "We were not living like rats underground."

Two days after Abdullah's and Aisha's wedding in April 2025, the RSF overran ZamZam, a camp for families displaced during the last war, which lay on the main road out of el-Fasher. The UN says at least 1,000 people were killed; the real number is probably much higher.

The camp had a medical clinic run by Relief International, an aid agency. Though other charities pulled out as the RSF approached, Relief International staff stayed at their posts. One of the doctors, 26-year-old Mahmoud Babikir Idris Adam, also worked shifts at the Saudi hospital. He had been one of the guests at Abdullah's and Aisha's wedding celebration.

When RSF fighters overran ZamZam they shot Mahmoud dead in his clinic, together with eight of his colleagues. Adam found out shortly afterwards. It was one of the only times in the war that he cried.

After ZamZam, el-Fasher was the RSF's last significant target in Darfur. RSF soldiers began bulldozing earth into piles to make a barrier round the city. Most exit roads were blocked by RSF checkpoints, and the soldiers manning them were much less inclined to let people pass through for a bribe than they had been in the past. Now travellers were frequently raped, held for ransom or executed. Men of military age were especially at risk. The Yale Humanitarian Lab, which monitored the RSF's barrier construction from space, described it as a "kill box".

There was hardly anything to eat. By then, the hospital's windows had all been blown out and replaced by sandbags. The medical staff tried to distract themselves. Adam obtained a PlayStation 5; between shifts he and the other staff lost themselves in "Grand Theft Auto", "FIFA" and "Assassin's Creed".

The men pooled their remaining supplies of cologne and swapped bottles of Sauvage and Baccarat for novelty. Adam contributed a heady scent called Rose Tobacco. His friend Yasir, who was also a doctor, instituted a weekly fashion ritual called "smart Tuesdays". He and one of the volunteers would put on their most colourful clothes and take pictures of each other pulling model poses. If they were going to die, they said, they might as well be dressed for it.

There were other small comforts. A black-and-white cat came to the hospital; Yasir adopted it and named it C5 after the incoming RSF rockets. When Bulldoze came home after going missing for three days in August, Adam was so happy he gave the dog some of his precious rice.

Music was another balm. A song by Abdullah Alawad, a Sudanese singer with a white streak in his beard, became their anthem. Once Yasir used flour to whiten his own beard, and they recorded a cover version on their phones, bawling out the chorus together: "A person can die but their memory lives on."

No one wanted to acknowledge the fear they all lived with. Wassim, the lab technician, felt suicidal some days. "My family was in danger, everyone around



me was in danger, every morning a lot of people died. Children died of starvation,” he said when I met him much later. “I felt like it was better for me to die.” At his lowest point he confided in Adam. The doctor talked him round, promising that God saw their work and would not forget them.

That summer, the staff’s resolve started to crumble. The bombardment was unrelenting, and roads out were getting more dangerous every day. Izzadin, one of the surgeons, watched as his operating team dwindled. A few asked him whether they should flee, but he refused to advise them. Some just stopped showing up; others came tearfully to say goodbye. Izzadin thanked them and gave them his blessing: “May Allah preserve you and help you reach a safe area.”

Wassim watched the other lab technicians leave. He was getting calls from a former classmate in the RSF, warning that the militia were about to seize the city and offering to get him out. The classmate spoke with contempt for those still in el-Fasher. He spat out a racist slur sometimes used to describe the dark-skinned people of Darfur: slaves.

“He called many times, saying ‘we are coming,’” said Wassim. Eventually, he blocked his old classmate’s number.

By the end of the summer, a kilo of rice, which fed a dozen medical staff for a day, cost more than \$750. Sometimes surgeons would operate on an injured child and find his bowels full of leaves. Often all the staff had themselves as animal feed made out of crushed peanut waste. They re-used the same coffee grounds for weeks. Some doctors tied sheets around their stomachs to alleviate the stabs of starvation. Adam had weighed 88kg at the beginning of the war: now he was just 38kg.

Medical supplies were also scarce, and doctors were forced to use medicines that were several years out of date. The only remaining spinal anaesthesia had expired in 2021.

The RSF executed anyone caught smuggling medicine into the city, but some people did it anyway. One of them was an elderly man the Saudi team had operated on; he was frail but would walk three days across the desert to bring back supplies. After hearing the hospital was nearly out of anaesthetic, some women walked to a town 90km away to buy ketamine, which they smuggled back in their bras.

The doctors’ cheerfulness became their armour. When a new load of casualties arrived, Yasir would announce, “Life is beautiful!” before getting down to work.

But by September it had become hard to maintain. On September 19th a missile slammed into a mosque near the hospital. The imam was married to Mahasin, the hospital’s administrator, who rushed to the site. Her husband was badly injured and begged her to look for their two young sons in the rubble. By the time she found their bodies, her husband had died. She buried them all in their bedsheets and left the city with her teenage daughter.

The hospital was down to two surgeons. Adam and his friends still didn’t want to go. If Saudi went unstaffed, most of the remaining population would leave and the city would be easy to capture. In any case, leaving was now as dangerous as staying. Yasir’s brother was killed at a roadblock trying to escape. A volunteer had left and was never heard from again.

After hearing the hospital was nearly out of anaesthetic, some women walked to a town 90km away to buy ketamine, which they smuggled back in their bras

The aftermath of an attack on the World Food Programme’s offices. Saudi hospital’s obstetrics clinic

By October everything was breaking. A bomb blasted a hole in the wall of the maternity ward that was big enough to walk through. There was an outbreak of cholera. On October 25th Abdullah decided he had to get Aisha, who was now pregnant, to safety.

They left with a group of other civilians. Among them was a man who had written social-media posts supporting the Sudanese army. An RSF fighter recognised him at a roadblock, and pulled his family aside. The soldier grabbed the man’s six-year-old son and cut the boy’s throat as he struggled and screamed for his mother. Then he released the man, telling him: “You couldn’t save your son. Go live with this pain.”

One of the RSF soldiers beckoned to Aisha. Abdullah stepped forward instead, meekly explaining that his wife was pregnant. To his surprise, the RSF soldier waved them through. “Go with my best wishes,” he told them. Abdullah looked the man in the face, astonished. It was the first time he’d seen evidence of humanity in an RSF fighter. He never forgot it.

That evening Adam and the remaining crew talked about whether they should follow Abdullah and Aisha out of el-Fasher. They were determined to live or die together, so they held a vote.

Adam, like the majority of them, voted to stay. It felt appalling to leave the patients to the RSF. But he sensed it would all be over soon no matter what he did. That night, as explosions shook the building, he walked through the hospital in the dark, saying a silent goodbye. He patted Bulldozer.

Ali, one of the last pharmacists, lay awake listening to the RSF artillery. In the early hours he fetched the others and told them they should vote again on leaving. “It’s the end,” he said. Reluctantly, Adam agreed.

It was shortly before sunrise. They had no plan—they just ran outside. All Adam took with him was a bottle of water and his Rose Tobacco. Terrified families filled the streets; mothers carried crying children. A few were riding donkeys but most were on foot. They were heading west, towards the city’s last collapsing defence.

Behind them, giddy RSF fighters roared in from the south, east and north, looting and shooting. Crowds of people seeking refuge at the university were strafed and mortared. Families were forced to lie down at gunpoint and crushed with armoured vehicles.





Later, videos would emerge of an RSF commander gleefully murdering groups of unarmed people. He boasted that he had personally killed more than 2,000.

Adam and the rest of the hospital workers joined a flood of people heading west, but the RSF seized them on the road. In the chaos, Adam's friends were put on trucks while he was marched to the abandoned school. For the first time since the siege began, he and his colleagues were separated.

Wassim, Ali and Yasir were imprisoned in the yard of the abandoned Children's hospital, along with thousands of others. For three days, there was virtually no water. Some prisoners died of dehydration. When a commander eventually brought in a tank, dying men swarmed towards it, trampling each other. A fighter shot into the crowd, killing three people.

Maddened by thirst, the prisoners broke into the septic tank and began to scoop up the fetid water with their hands. There was another cholera outbreak and diarrhoea coated the ground. The RSF fighters, terrified the disease would spread, appealed for doctors to come forward from the crowd. An official said there had been orders from the top not to kill people with medical skills.

The Saudi team worried it was a trap. On the other hand, they were as good as dead anyway. Eventually, one by one, they pitched in, isolating cholera patients with a barricade of broken chairs and branches, and

Animal feed made out of crushed peanut waste was often all the staff had to eat. Rancid cooking oil found in a jerrycan. Some doctors tied sheets around their stomachs to alleviate the stabs of starvation

The Saudi team worried it was a trap. On the other hand, they were as good as dead anyway

treating them as best they could with the medicines they were given. Over the course of the next ten days they managed to contain the outbreak, though not before 200 people had died.

Afterwards, the RSF took them back to Saudi. The militia's leaders seemed to want the hospital working again. In the courtyard the team found a small boy crying. He whispered to them that his mother and father, both patients, had been killed by RSF gunmen just after the doctors had left. The UN later said around 460 people were shot dead when the hospital was taken—mostly patients in their beds.

A few weeks later Wassim, Ali and Yasir all managed to escape, reaching the border with Chad via a circuitous route of small villages. They worried all the time about what had happened to Adam.

Far away, in the darkened schoolroom on the edge of the desert, Adam was listening to the peanut-seller explain how she would help him escape. Tell the guards you need to relieve yourself, she said, then meet me at the back of the building. He did as she said, walking unsteadily into the glaring sun. The woman guided him surreptitiously to her home, where he hid for 20 days.

Adam moved from house to house, mostly at night. Each time a person hid him, he'd ask them to try to find someone on the path ahead who might help. Sometimes a friendly driver would give him a lift. It took him a month to reach Khartoum.

He was desperate to find out what had happened to his friends, but was still afraid that the RSF would track him down. In the end he made a fake Facebook account, and found one of the hospital volunteers online. It's Adam, he wrote. I'm alive.

Today, el-Fasher is a ghost town. Satellite images show grass growing on its market. Several staff from the Saudi hospital are still missing. The surviving members of the team are scattered. Many cannot sleep or are plagued by nightmares. One woman can't stop dreaming about scrambling over a ditch full of dead bodies.

This summer I met Adam in the town where he's been hiding. He was still nervous about RSF reprisals, and asked me not to name it.

"Those who survived, some are bitter," he said. "When we were working, the world said we were heroes. But now we are forgotten."

Every time he connects his phone to the internet it is flooded with messages from desperate colleagues: asking for medicine, a job or money. It overwhelms him. But he can't switch off. He is a helper. If he doesn't help, who is he?

In a strange way, he said, he and the others felt nostalgia for the siege. Not for the suffering, but for the purpose and unity they had back then, and the family they became.

"Even now, I feel as though I never truly left el-Fasher. My soul is still there," said Adam. "The city is not destroyed as long as some of its people are alive." ■

Names have been changed

Katharine Houreld is a journalist based in Rome. Previously she was East Africa bureau chief for the *Washington Post*. **Hafiz Haroun** is a Sudanese journalist

Illustrations by **Michelle Thompson**

Business



Artificial intelligence (1)

Where credit's due

The AI industry's gigantic debts are making investors nervous

CREDIT MARKETS are coming for CoreWeave. The price of a five-year bond issued by the “neocloud”, which rents out data-centre capacity for artificial-intelligence models, has fallen by 16% since July. The bond’s yield is now 15%—a level associated with companies in financial distress—up from 10% in July. The price of credit-default swaps offering insurance against a CoreWeave default implies that the probability of the firm being unable to service its debts in the next five years has risen above 60% (see chart 1 on next page).

Investors increasingly worry that the companies at the heart of the AI boom will be unable to generate the cashflows necessary to service their vast debts. These concerns have spilled over from credit markets to cause a wobble in the stock market, too: having fallen sharply, the tech-heavy NASDAQ index is now back to where it was in mid-May. Investors are pricing in a debt stock that is getting big-

ger, more opaque—and increasingly risky.

It is not just CoreWeave causing furrowed brows. Yields on the bonds of rival neoclouds, including Nebius and TeraWulf, are also rising. On October 19th the public listing of Elice, a South Korean competitor, turned sour as its share price plunged by a third in a day. Three others have delayed or cancelled their own listings in the past month. These businesses live on debt. Of the ten listed neoclouds, only two are profitable. The combined borrowings of this group, at \$100bn, are nine times its annual revenues. Of that debt,

\$57bn-worth has been issued this year.

Moreover, those sums are but a small part of the fast-growing stock of AI-related debt. Oracle, a software pedlar turned cloud provider, has now racked up \$169bn of borrowings, with \$25bn-worth issued this year. SoftBank, a Japanese conglomerate, has similar ambitions, and has taken out about as much since the start of January. Elon Musk’s SpaceX, for which revenue is rocketing thanks mostly to its fast-growing cloud business, has issued \$65bn of debt this year.

Then there are the leading “hyper-scalers”—Alphabet, Amazon, Microsoft and Meta—which have borrowed \$214bn between them in 2026, up from \$83bn in all of last year. An additional \$79bn of data-centre debt has been issued by special-purpose vehicles (SPVs), most of which are joint ventures between cloud providers and financial institutions. On top of this is the \$84bn borrowed by chipmakers such as Nvidia and others in the semiconductor supply chain. Add the amount issued by other companies providing data-centre gear and America’s electricity utilities, which are also having to invest to keep up with the AI boom, and the total borrowed so far this year rises to nearly \$850bn—roughly four times the amount the same group of companies issued in 2023 (see chart 2). Together their balance-sheets ►►

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▶ carry more than \$3trn of debt.

Not long ago the AI boom was financed by the cashflows of the hyperscalers. But investment has grown beyond what can be paid for by their other businesses, and far beyond what consumers and enterprises are so far spending on AI. JPMorgan Chase, a bank, expects around \$5.5trn in capital spending between now and 2030 to support the technology's growth, with three-quarters of that funded by debt. Borrowers are turning to imaginative financing strategies, and tapping all manner of lenders.

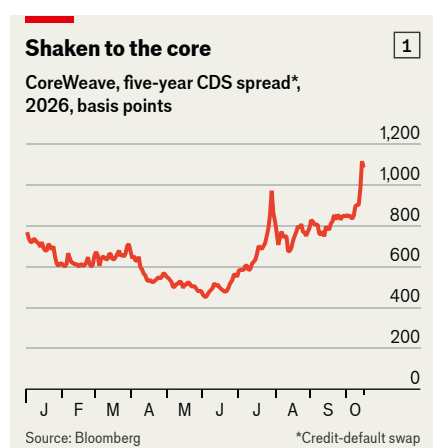
Bonds, including whoppers such as Alphabet's \$32bn offering in February, remain a popular choice. Even for these everyday instruments, however, the scale required means issuers must get creative. Foreign credit markets are increasingly sought out. So far this year about 30% of bonds issued by the five biggest cloud providers—meaning the hyperscaler quartet plus Oracle—have been in non-dollar currencies, including euros, pounds and yen.

At the same time, other instruments are growing in popularity. SPVs are now commonplace. One example is Sopaipilla, a project masterminded by Meta (and named after a pastry). It consists of ten data centres in El Paso, Texas, which in total will provide roughly a gigawatt of computing power. The site is owned by a company called Wurldwide, which in turn is owned by Meta, with a 20% stake, and BlackRock, an asset-management giant, which holds the remaining 80%. Wurldwide issued \$13bn of debt in August to fund the building of the campus, which Meta has agreed to lease for 20 years.

Such structures tick plenty of boxes. BlackRock and its clients get a stream of steady income guaranteed by Meta, which in turn gets to add computing capacity while keeping the debt off its balance-sheet. Credit-rating agencies have given the SPV a score one notch below Meta's.

Chip-backed financing, which entails using the silicon deployed in a data centre as collateral, is also on the rise. SpaceX is said to be looking to secure \$40bn of funding using the approach in order to purchase more chips from Nvidia. Often chip-backed financing is arranged through an SPV. Oracle is in talks with Apollo, a private-markets giant, and Goldman Sachs, an investment bank, to fund a big purchase of semiconductors that will be held by a separate entity and leased to Oracle. Anthropic and OpenAI, two makers of frontier AI models who are eager to gain greater control over their computing capacity, are reportedly negotiating similar arrangements to procure large amounts of chips directly.

Chip-backed financing makes assessing risk "infinitely more complicated", says Roelof Steenkamp of Fitch, a credit-rating agency. A consequence of such arrange-



ments is that a data-centre's bricks and mortar, the chips inside it and even the site's power source (if it has its own) can each be financed by its own layer of debt.

On top of this are the obligations that are not quite debt, but close to it. The five biggest cloud providers have lease liabilities on their balance-sheets totalling over \$250bn, according to CreditSights, a research firm. A further \$1.2trn-worth of leases have been agreed but are yet to commence. Then there are commitments to purchase products from suppliers worth an additional \$1.5trn.

A final complexity comes from the backstops that companies in the AI nexus with bigger and healthier balance-sheets are offering to guarantee the debts of others. Nvidia has been particularly enthusiastic in this regard, placing itself on the line to cover as much as \$300bn of debt used to purchase its chips if its customers are unable to repay their creditors. Alphabet and Broadcom, which develops custom chips for cloud providers and model-makers, have also provided backstops to some of their customers. Such deals make it even more difficult for investors to determine where the risks lie, and how far

losses from a default might spread.

Who is exposed? The short answer is everyone. All types of financial firms are holding AI debt, partly because there is so much of it. Large asset managers have been the biggest buyers. For example, Pimco, one of the world's biggest bond-fund managers, bought \$18bn-worth of the \$27bn bond issued for Meta's Hyperion data-centre campus in Louisiana. It then sold on tranches of the debt to institutional investors, such as pension funds and insurance firms.

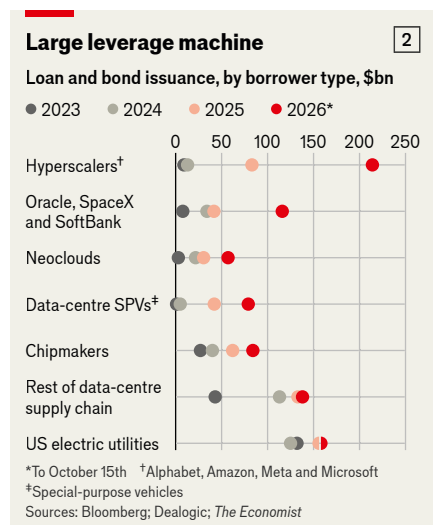
Providers of private credit, including Apollo and Blackstone, are spearheading many of the more creative deals. Sometimes these loans, too, are syndicated to institutional investors—including insurers controlled by the private-credit providers themselves. A sizeable chunk of the debt Apollo lent to Broadcom in June reportedly ended up on the books of Athena, its insurance arm. Hedge funds have also piled in to the market for AI debt, showing particular interest in the neoclouds.

Despite the recent market wobble, investors on the whole are not yet panicking about the debt binge. Only about 15% of the value of AI-related bonds issued this year have junk status. And although the various backstops in place make the stock of AI debt more difficult to interrogate, the cash-rich balance-sheets of companies like Nvidia would help to absorb any shock. On October 15th Jensen Huang, Nvidia's boss, defended the prospects of CoreWeave, some of whose debts his company has guaranteed, arguing that its "cost of capital is actually decreasing" over time.

Default logic

Even so, dangers lurk ahead. One threat is from rising borrowing costs. War in the Gulf, persistent inflation and anxiety over the growth of public debt have caused yields on government bonds to climb rapidly in recent months, pushing up interest rates for corporate borrowers. The scale of debt issued in support of the AI boom has itself played a part. For the deep-pocketed hyperscalers, that is a source of pain; for shakier borrowers like CoreWeave—whose interest bill already soaks up a quarter of annual revenue—it could prove deadly.

The even bigger threat would be if demand for AI were to stagnate. Data from Ramp, a provider of corporate charge cards, shows that spending on AI among its customers has flatlined since July, as businesses try to contain spiralling costs. Softening growth, in turn, might lead Anthropic or OpenAI to delay indefinitely their much-anticipated public listings, which could cause investors to rethink their exposure to AI. The bigger the tower of AI debt grows, the more vulnerable it will become—and the graver the consequences should it come crashing down. ■





Artificial intelligence (2)

Call my agent

Personal AI assistants could reshape the digital economy

SILICON VALLEY has long dreamed of building a digital assistant capable enough to rid users of many of the tedious personal tasks that gobble up time and attention. Fictional representations, such as J.A.R.V.I.S. (Just a Rather Very Intelligent System) in the “Iron Man” films, set expectations high. In 2010 Apple, the iPhone-maker, acquired Siri, one such aide. It turned out to be disappointingly moronic.

Now, amid the current wave of investment in artificial intelligence, the era of personal AI agents may at last have arrived. In the past two months Meta, a social-media giant, and Instinct, a startup, have released two such bots to great fanfare. Instinct’s assistants, which users contact through Apple’s iMessage service or Meta’s WhatsApp, are already checking users into flights, sourcing sold-out concert tickets and arranging dinners with friends, among much else. Muse, Meta’s offering, has similar powers, but can be reached via WhatsApp, a web browser, a mobile app—or, from later this year, Meta’s smart glasses.

The big shift from earlier generations of digital assistants, explains M.G. Siegler, an investor and blogger, is that these new bots can work proactively, rather than reacting only to what users explicitly ask for. Instinct “really just works in the way I believe we all want AI to act”, says Noah Shinn, the startup’s 24-year-old founder.

Uptake is soaring, so much so that Mr Shinn reckons “in a few years every user in the world that has an internet connection

is going to have access to a product like Instinct.” Before then, however, the companies developing personal agents will have to overcome a variety of hurdles to more widespread adoption, including concerns over security and reliability and the reluctance of some big businesses to allow the tools to interact with their systems.

Instinct and Meta have pursued very different approaches to attracting users, but both have been wildly successful. In Instinct’s case, users must be invited by a friend or hand-picked from a waitlist. Even so, the number of users has been growing by about 10% daily. Simplicity keeps them coming back: around half of people who have signed up to Instinct continue using it at least once a week after the first month, according to the startup. Giving Instinct’s agents an instruction is as simple as writing a short text; they will then reply with updates on their progress.

If Instinct is the private party taking place behind a velvet rope, Muse is the open-invite rave anyone can partake in (so long as they live in America or Canada). By all accounts, the party is heaving—and people are lingering, too. More than 10m people have downloaded the Muse app since its debut a little over a month ago, according to Sensor Tower, a data provider. ChatGPT, the hit chatbot from OpenAI that precipitated the AI boom, had only 3.7m downloads of its mobile app in the same timeframe after its release, around six months after the web version was first

unveiled. Muse is retaining users at about the same rates as ChatGPT, too.

Persuading partygoers to expose their data, however, is not always easy. Personal agents need private information to reach their potential: without access to a calendar or a credit card they are little more than a glorified chatbot. Some in techland fear that the bots will leave users vulnerable to new threats such as prompt injections, where an attacker sneaks text to an AI through a website’s computer code and deceives it into misbehaving.

The companies seem to be taking these concerns seriously. Meta assigns a private server for each Muse user to hold their data and operate their assistant. It has also taught Muse various ways to resist prompt injections, though some security researchers reckon it remains susceptible to malicious instructions. Instinct has revealed less to the public about its cyber-security measures, but Mr Shinn says the service is designed around the principle that users “should always be in control of their data”.

On top of that are concerns that personal agents could wreak havoc out of sheer stupidity. Meta has admitted that Muse will make mistakes, and has put a number of guardrails in place to minimise the potential damage when it does. Even so, some users may balk at handing over their credit-card details until they are confident their agent will handle them wisely.

Prolonged exposure appears to build that trust. About 40% of Instinct users link a credit card within three weeks. Instinct and Meta also work with Stripe, a payments company, to offer a digital wallet that allows users to make purchases without handing over their banking details directly, which may reassure some.

The other big challenge for bot-builders is to persuade other businesses to welcome their agents. Some appear happy to do so. Shopify, a software platform for e-commerce businesses, is working to make it easier for Instinct and Muse to buy from its network of vendors. Meta is also working with Walmart, America’s biggest retailer; Instacart, a grocery-delivery service; and Expedia, a travel-booking site.

But other companies are unconvinced. Amazon, for instance, is currently off limits to both Instinct and Muse. The e-emporium generates a good chunk of its profit from showing users ads, and currently has little need for the extra traffic that might come its way via personal agents. Amazon has also complained that Meta failed to give it a heads-up about Muse’s release.

Some Silicon Valley bosses say that they are waiting to see how the technology develops before opening their systems to personal agents. In the meantime, the bot-builders are busily courting them. Mr Shinn gives the example of restaurant-booking platforms, some of which Instinct

► has won over by agreeing to prevent its agents from booking vast numbers of reservations, only to cancel all but one. Even Andy Jassy, Amazon's boss, appears to be keeping an open mind about the future, saying previously that he is "very hopeful" a fair deal will eventually be reached that allows agents to use its marketplace.

Such agreements will be necessary if personal agents are to become a viable business. Mr Zuckerberg has said that he envisages Muse will earn its keep from a

combination of subscriptions and a cut of the transactions it facilitates. Mr Shinn reckons that most online spending will eventually flow through personal agents.

Which bot-builder wins the biggest share of that business is still up for grabs. Instinct has raised \$1.4bn to date. That is a tidy sum for a one-year-old startup, but a pittance compared to what Meta has at its disposal. OpenAI and Google, maker of the Gemini models, both offer their own personal agents. Although these are currently

pitched more for business than consumer use, they could expand their focus. Airbnb, a short-term rental platform that wants to make itself into a one-stop-shop for all manner of experiences, has also said that it plans to launch a personal agent next year.

Then there is Apple, which in June gave Siri a big makeover. The new bot is less of a clod, but it lacks most of the autonomous capabilities of the agents now winning over consumers. Perhaps the iPhone-maker should consider messaging Instinct. ■

BARTLEBY

The value of paid work

If AI does wipe out jobs, loss of income won't be the only problem

SOMETIMES YOU embark on a project and realise that you have misjudged things. To your horror you realise it's too late to turn back. So you plough on and hope to avoid catastrophe. But enough about Mark Zuckerberg drinking Guinness. Other artificial-intelligence big-wigs harbour deep misgivings of another kind—about the potential effects of the technology they are developing. On October 18th Anthropic, an AI lab, said it plans to put 5% of its shares into a public-benefit fund that might end up distributing cash to people affected by economic upheaval. A day later Elon Musk pledged to give one share in SpaceX to every child in America.

There is no sign yet of an AI jobs apocalypse. But if the technology were to destroy many more jobs than it creates, the question of how much paid employment matters, not just to people's income but also to their happiness and dignity, would become salient indeed.

There are Pollyanna-ish answers to this question. Some point out that history is full of societies that were not organised around paid work. Survey data show that most retired Americans report being satisfied with their lives. Solve the piddling problem of how to fund a life without work, in other words, and everyone could merrily spend their days growing prize-winning tomatoes or going on river cruises.

The truth, inevitably, is a lot more complicated. A review of the academic literature on well-being and work, published last month by Stephanie Chan and other researchers from Google DeepMind, another AI lab, is a helpful reminder that paid employment provides benefits that go well beyond income, and that the path to a good outcome in the event of real economic upheaval

would be a narrow one.

Consider what work provides. Marie Jahoda, an influential academic, identified five latent benefits of employment: the structure it imposes on people's days; the social contact it entails; the sense of collective purpose; the status afforded by being in work; and the nudge it gives away from idleness and towards activity. (There are others, too: a recent paper by Noah Kouchekinia of the University of California, Irvine, and his co-authors found evidence that cognitive decline accelerates among adults who leave the workforce before retirement age.)

Even people with plenty of options seem to be wary of a life of leisure. There aren't that many Silicon Valley billionaires who pack it all in to focus on their hobbies. In a similar vein, a paper by Bengt Furaker and Anna Davidsson of the University of Gothenburg looked at how lottery winners in Sweden responded to their good fortunes. A larger windfall did make it more likely that winners would take a chunk of unpaid leave and reduce their working hours, but only a small share

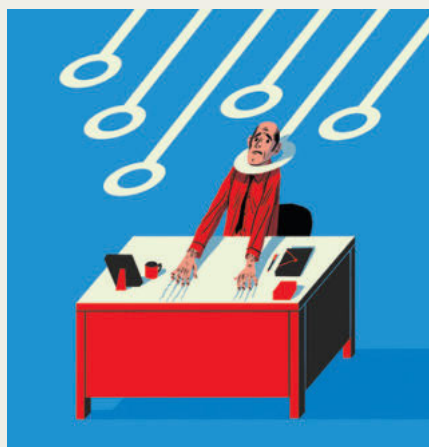
of them quit work entirely.

Some jobs are much less enjoyable than others, of course. And it is possible to derive latent benefits elsewhere, from caregiving, say, or being a stay-at-home parent. A paper by Michelle Jongenelis of the University of Melbourne and her co-authors looked at the effects of volunteering on the well-being of Australian retirees. Even a very small amount—as little as an hour a week—yielded notable improvements in scores for life satisfaction and purpose.

But this is cold comfort for people who want and expect to work. In another paper, Clemens Hetschko of the University of Leeds and his co-authors traced German adults' self-reported well-being as they entered retirement. Life satisfaction for employed people did not change much after they left the workforce. But people who had been long-term unemployed when they hit retirement age reported a big jump in well-being.

On the face of it, this seems odd. The people who had been in work would almost certainly have experienced greater upheaval to their daily routines and incomes. The authors' theory is that unemployed people have switched social categories, from an unwanted one when they are of working age to a respectable one when they reach retirement age.

In other words, anyone who blithely says that people can substitute other activities for paid employment is wishing away the evidence. Some jobs are dismal. But at the moment nothing else brings the same bundle of psychological and monetary benefits in such a socially acceptable form. Making sure people have enough money to live on if AI takes away their jobs is a big problem. Giving them a sense of self-worth would be just as difficult.



Indonesia

The archipelago of broken dreams

JAKARTA

Despite its bountiful natural resources and vast population, multinational businesses are losing confidence in Indonesia

UKRAINE AND Palestine are no one's idea of attractive markets. Yet that is the company Indonesia may soon keep. On October 15th MSCI, an index provider, threatened to reclassify it as a "standalone" market, two notches below its current status as an "emerging" one. MSCI blamed a stock market plagued by opaque listings and suspected pump-and-dump schemes. Investors have been fleeing. In dollar terms Indonesian stocks have lost half their value in 2026, rendering it the world's worst-performing market (see chart).

The sorry state of the bourse is emblematic of the deeper decay in Indonesia's business environment during the presidency of Prabowo Subianto, under whom cronyism has grown rampant and the government has become increasingly meddling. His reign has unsettled multinational businesses, many of which covet Indonesia's bountiful natural resources and vast population of consumers.

Earlier this year the China Chamber of Commerce in Indonesia, a business association, circulated a letter complaining that its members faced "excessively stringent regulation, over-enforcement, and even corruption and extortion" by authorities. Their plight is not unique. "If you swapped out the letterhead, it could have been written by us," says someone from a similar Western association in Indonesia. If Indonesia's president is not careful, the ranks of multinationals scaling back their presence in his country will grow.

Part of the problem is Mr Prabowo's economic nationalism. It represents a reversal of the progress that has slowly been made in Indonesia since the Asian financial crisis of 1997-98. Mr Prabowo's predecessor, Joko Widodo, elevated a business-minded coterie of fixers, including Luhut Pandjaitan, a coal baron. They let foreign businesses cut through Indonesia's disorganised, corrupt bureaucracy, luring in firms such as Tsingshan, a Chinese miner, and LG Energy Solution (LGES), a South Korean battery-maker. Few doubted that Mr Widodo's inner circle enriched themselves. But for foreign businesses, they made Indonesia a simpler place to operate.

Mr Prabowo, by contrast, rails against "irresponsible powers" that are "stealing" Indonesia's resources, and has installed a new cohort of cronies with little interest in economic strategy. "No single person is playing the Luhut role in the Prabowo

administration," says Brasukra Sudjana of Vriens & Partners, a consultancy.

That has damaged confidence among multinationals. In the final quarter of 2024, during which Mr Prabowo took power, inflows of new foreign direct investment hit \$16bn, more than double the level of four years earlier. They have since stagnated. A \$12bn scheme backed by Xinyi, a Chinese solar-panel producer, to build an "eco-city" has lost momentum. LGES has dropped plans for an \$8bn battery project.

Indo-seizure

The biggest deterioration in conditions has come in the commodities sector. Rules for miners, such as stringent quotas on production, are in constant flux. Businesses complain of shakedowns. After floods devastated the western island of Sumatra last year, the government blamed miners' abuse of forest land. It then attempted to nationalise Martabe, a gold mine controlled by Jardine Matheson, a conglomerate operating from Hong Kong, though it later backed down.

Freeport-McMoRan, an American miner, was bullied into divesting a 12% share of its Indonesian arm last year, which had already been 51% owned by the state (it received next to nothing in return). Sjafrie Sjamsoeddin, Indonesia's defence minister and one of Mr Prabowo's closest confidants, has overseen a sweeping crackdown on forestry. A third of all palm-oil plantation land has been expropriated.

In May Mr Prabowo announced abruptly that a new state agency, Danantara Sumberdaya Indonesia (DSI), would centralise exports of palm oil, coal and ferro-nickel.

Officials claim it will act merely as a monitoring agency, but Mr Prabowo continues to muddy the waters. "Imagine in future how much we will save when all our export commodities will be monitored and controlled by DSI," he said in August.

The regulatory leash is also tightening elsewhere. Take salt and sugar, where a push for self-sufficiency has curbed import licences. Indonesia has limited raw-sugar production, and food-makers complain that the quality of local salt is too low for them. Troubles with import licences have led to supply-chain snarls for Coca-Cola and PepsiCo, two drinks giants. In the past, stymied firms might have cut deals with officials or hired politically connected lawyers. "Now [my contacts] say companies are simply being squeezed with no clarity whatsoever," says Tom Lembong, a trade minister under Mr Widodo (who faced jail in a dubious graft case related to illegal sugar-import permits, until Mr Prabowo pardoned him last year). Further burdens are being added: on October 18th new Halal-certification rules were put in place on various consumer goods sold in Indonesia, including cosmetics and supplements, though the government subsequently delayed the implementation for some categories to 2028.

Multinationals targeting Indonesia's consumers have also encountered stagnant spending. Although official GDP growth is rarely lower than 5%, the share of workers in Indonesia's middle class (as defined by authorities) has fallen from 16% a decade ago to 7% last year. The problem predates Mr Prabowo, but on his watch more Indonesians are slipping into low-paying informal jobs. Real wages have fallen for skilled workers, too. A recent survey by NielsenIQ, a data provider, found that only 9% of consumers felt financially better off than a year ago, down from 54% in 2024.

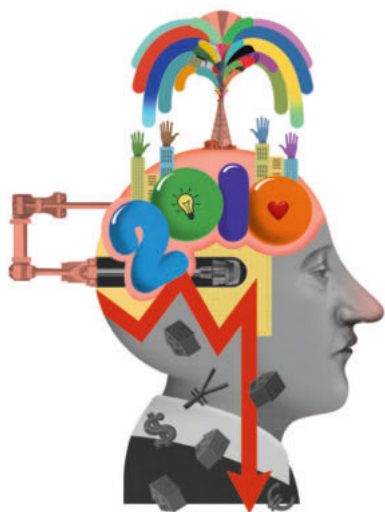
The pain has been felt across a wide range of industries. Domestic car sales remain shy of 2019 levels, hurting multinationals such as Toyota, the top auto brand in Indonesia. Foreign pedlars of packaged consumer goods have had to cut prices to attract shoppers—though even that is "not necessarily translating into proportional growth" in volumes, notes Krisetiadi Purwanto of NielsenIQ. At the Indonesian arm of Unilever sales have fallen by a fifth since 2019, while operating profit has more than halved. (A Gaza-related boycott, another risk in the Muslim-majority country, hasn't helped.) In January the British conglomerate sold its struggling tea business in Indonesia to a local competitor. In a country where two-thirds of men puff, big tobacco has faced falling sales as consumers turn to cheaper sticks, including black-market ones that avoid taxes. Foreign firms' dreams for Indonesia are at risk of going up in smoke. ■



SCHUMPETER

The long 2010s

A revolutionary decade deserves a revisionist eye



AS DECADES GO, the 2010s were an embarrassment. Tech bosses, now preoccupied with artificial-intelligence models and rockets, talk dismissively of the consumer apps they built back then. Bankers spent it in the drunk tank. After a long summer of executive exuberance, the 2010s were, in many corner offices, a winter of discipline: imposed by governments, the public, activist investors and boards. Yet this *decennium horribile* has far more to say about business today than the tales from the 1870s, 1920s or 1990s that investors tell themselves. Were the 2010s a cringe-worthy decade? Certainly. But a revolutionary one nonetheless.

Silicon Valley is ripest for 2010s-revisionism. How is it that America can undertake an enormous, energy-intensive construction boom on a scale never before seen, unbothered by war in the Middle East? Thank the 2010s. Because of the shale revolution, America ended the decade as a net exporter of energy for the first time in more than half a century. And that endless well of capital now funding the construction of data centres? After the financial crisis, speed limits were imposed on banks and the global lending system was transformed. Many of the capital-markets tricks used today, from special-purpose vehicles to offshore insurance capital, were tried and tested in the 2010s.

If this gamble pays off, it will be because AI has revolutionised white-collar work. It is impossible to understand office life without understanding the 2010s. Back then politicians fretted about the gig workers of Uber (2010) or DoorDash (2013). But office life was changing far more. Workers were ordered by the lanyard-Stasi to bring their whole selves to work. When they arrived at the soft-furnished panopticon that is the modern office they built “dashboards” using Datadog (2012) or Snowflake (2014), took Zoom (2013) calls from “hot desks”, perhaps in a WeWork (2010), to the sound of distant machine-gun fire from Slack (2013) messages.

When it was happening, the 2010s felt like an age bereft of new business thinking. How wrong that has proven. Effective altruism is a philosophy whose exacting ethical calculus grasps at the universal, but which could have come only from the cloisters of Oxford and Stanford in the early 2010s. The content of its ideas is set out on LessWrong (2009), an online message board, and put

into practice by charities like 80,000 Hours (2011). It is now the dominant philosophy of Silicon Valley AI labs, which makes it easily the most influential management idea out there.

Politicians likewise find plenty of ideas left on the shelf from the revolutionary decade. Universal basic income was a fringe idea in the equality-obsessed 2010s but is now talked about as serious policy in the AI-obsessed 2020s. The big-is-bad school of anti-trust, embraced on both left and right, is a creation of prestigious American law schools during the mid-2010s. Across the rich world, wealth taxes have become a favourite policy of the left. The central ideas were set out by Thomas Piketty and Gabriel Zucman, a pair of French economists, in the 2010s.

2010s attacks are best repelled by 2010s defences. Anthropic and OpenAI are both structured as public-benefit corporations, a form that, in theory, makes it easier to balance the interests of society and shareholders. Both labs are incorporated in Delaware—under rules from 2013. In 2019 the Business Roundtable, a powerful CEO-lobby group, announced that a firm’s shareholders would henceforth yield to its stakeholders. Today it reads like an artefact from the high point of corporate high-mindedness. Yet its power endures. This week Anthropic pledged 5% of its shares to non-profit causes. SpaceX is also giving stakes to the public. To misquote Marx, businessmen do not make history as they please, but under conditions passed down to them from the 2010s.

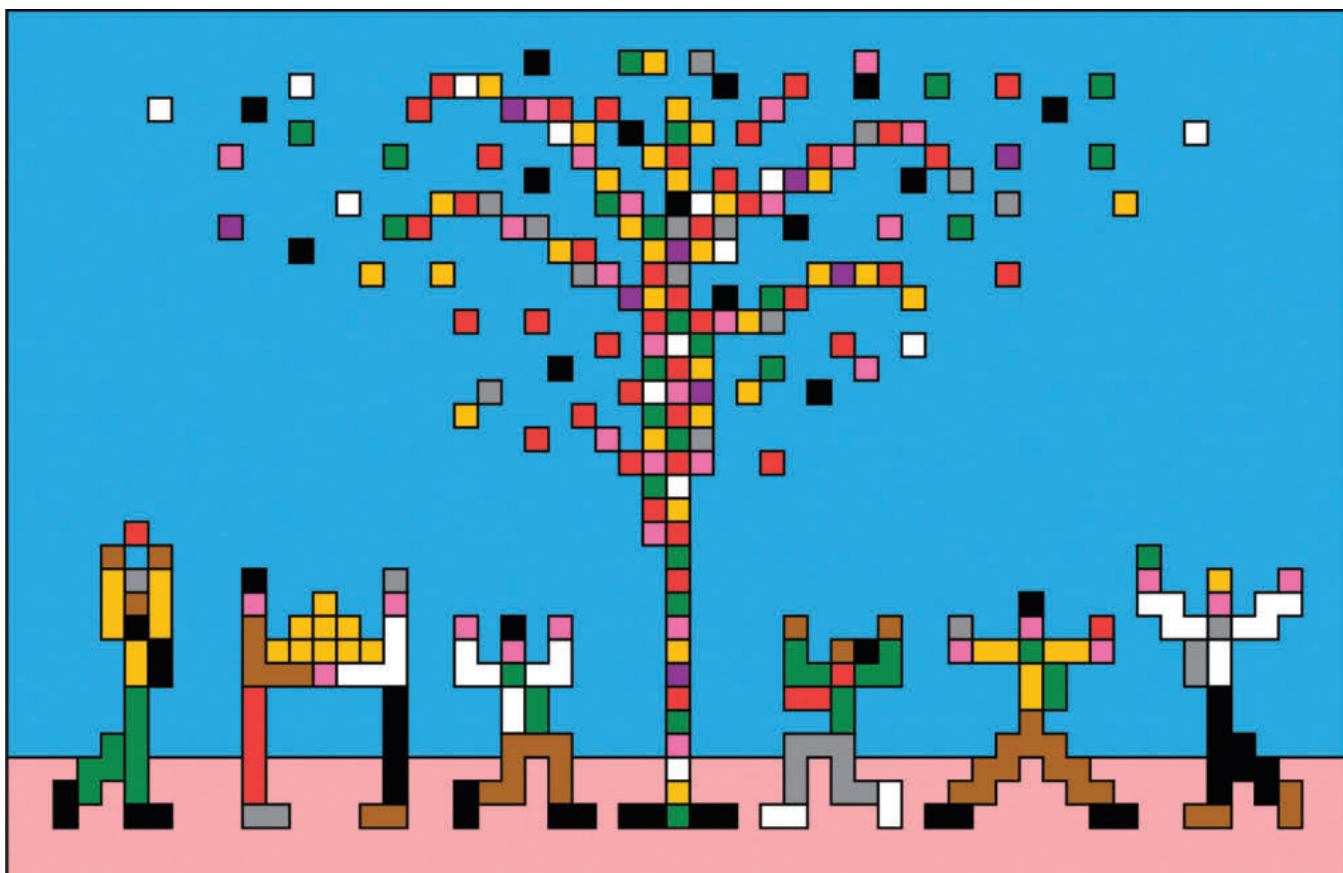
Not every big idea from the 2010s survives in full. Central banks’ policy of keeping interest rates around zero ended in 2022. Zealous corporate social-justice campaigns are fewer than before. Still, there are corners of commerce which keep the unreformed 2010s alive. Private-equity funds are devising ways to avoid returning money to their backers, lest they face the post-2010s world. Europe still clings to ESG. So do consultants. McKinsey’s studies of women and ethnic minorities in the workplace were the sacred texts of that era. This month the consultancy demoted a partner for publicly questioning similar ideas. Bain, a rival, recently wrote that “77% of US customers say they are concerned about environmental sustainability, up from 69% last year.” If you say so. Like Japanese soldiers who ignored the end of the second world war, some hardliners from the B-Corp battalion fight on.

20/10 vision

It is difficult to imagine a wave of nostalgia for the 2010s like that for the 1990s and 2000s. What is there to be nostalgic for? A golden age of gas won’t cut it. A golden age for streaming, maybe. The big beasts of music—Taylor Swift, Drake, etc—have the same ageless commercial quality as the Marvel superhero franchise.

But interest in the 2010s will surely grow. The euro zone, which spent much of the 2010s in crisis, now stands on the brink of another. Understanding Silicon Valley means understanding the 2010s. “The Social Reckoning”, a new film about Facebook, is but one of a stream of 2010-gazing works. A series will soon be released about Sam Bankman-Fried, a late-2010s crypto fraudster (interviewed from prison this week by *The Economist* for our “Money Talks” podcast). Elizabeth Holmes, another 2010s fraudster, also stars in a new film. Then there’s Elon Musk, the world’s richest man, and now the subject of one of the world’s longest documentaries. His flying car is the antidote to the 2010s mantra that all we ended up with is 140 characters. Yet Mr Musk is also an electric-car magnate whose power derives from a lawless social network. A man of his age? Absolutely: a man of the 2010s. ■

Finance & economics



Artificial intelligence and finance

The new market-makers

NEW YORK

AI compute is the new oil—and needs a new market

ARTIFICIAL INTELLIGENCE is changing many things about the modern world. Language is no exception. The word “compute”, for instance, used to be regarded as a verb. Today even grammar pedants grudgingly accept it as a noun, referring to the processing power generated by advanced chips. This new, non-verbal compute is the fuel of a technological revolution.

Demand for processing oomph has surged, and it is in short supply. About \$360bn was spent on AI compute last year around the world, according to Boston Consulting Group, about 50% more than on copper. By 2030 BCG expects \$2.3trn in transactions, roughly the size of the global trade in crude oil today.

For all its impressive size, however, the compute market lacks sophistication. The “hyperscalers” (a still somewhat arcane piece of IT jargon for a handful of giant

cloud-computing providers including Amazon, Google and Microsoft) and frontier AI labs (such as Anthropic and OpenAI) make deals for tens or even hundreds of billions of dollars of compute. But such arrangements are unavailable to thousands of smaller firms. Buyers and sellers also have few of the derivatives that in established markets allow them to hedge their exposures and speculate.

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The compute supply chain, then, looks ripe for marketisation. In the most simple form, chipmakers (like Nvidia and AMD) sell advanced AI semiconductors to equipment manufacturers (such as Dell and Hewlett Packard Enterprises), which package the silicon into racks and servers to sell to data-centre operators. Besides the hyperscalers, these include a few large “neoclouds” (one more linguistic innovation, denoting independent providers like CoreWeave and Nebius) and hundreds of smaller, less well-known firms.

The operators, in turn, rent out access to compute to customers for a fixed period, often several years. Customers range from the hyperscalers (which supplement their in-house compute with rentals) to startups running open-source AI models.

So far, so simple—in theory. In practice, things quickly get complicated. That is because compute is heterogeneous: different chips are sold in different servers, at different locations, for different time periods. Matching buyers and sellers is finicky. Every business that needs processing power has a “compute guy” (or several) buying second-hand capacity through an opaque network of middlemen. Many of these informal brokers, some shadier than others, tout their offerings through mes- ➤

▶ saging apps like WhatsApp and Telegram. The whole thing looks less like trading a high-tech commodity and more like peddling illegal drugs.

In a market that is so fractured and immature, providers and purchasers alike prefer the safety of long-term contracts. On paper, these guarantee capacity to users and revenues for themselves. In reality, given how fast the technology and the market of AI are evolving, it is hard to tell how much such deals are worth: today's buyers and sellers may not be around in a few years to honour their commitments. The surging yields on CoreWeave's bonds highlight the uncertainty (see Business section). Who will make a killing? And who may not make it at all? With lenders struggling to price risk, many smaller operators buying and renting compute face double-digit interest rates.

Fortunately for everyone involved, proper markets are being built around the compute supply chain. Some budding bourses, such as Compute Exchange, list GPUs (the increasingly familiar shorthand for graphics-processing units, AI's silicon workhorse) by location, rental duration, price and availability. Titans of global derivatives trading, including CME Group and the Intercontinental Exchange, hope to launch their own compute futures. They have teamed up with startups pioneering compute indices, pegged to the rental price of popular AI chips. They await regulatory approval.

Rather than wait for exchange-traded derivatives to be approved, some compute-market pioneers are creating over-the-counter instruments of the sort common in credit and foreign-exchange markets. In March a startup called Anera Labs arranged a six-figure pilot trade for June with FalconX, a cryptocurrency broker, based on the future rental price of Nvidia's popular H100 GPUs.

Luxor, another startup, offers operators swap-like contracts that guarantee fixed cashflow per server, per hour. If the spot price for compute is below the price agreed in the swap, the operator is paid the difference. If the spot price is higher, it is the operator that pays. This payment, explains Ethan Vera, one of the firm's co-founders, may for example be made through a revenue-sharing arrangement. Luxor's bespoke derivatives are modest for now, in the tens of millions of dollars, but the potential is vast.

As American exchanges await the thumbs-up from regulators, upstarts are getting off the ground elsewhere. From its exchange in Bermuda, Architect Financial Technologies, founded in 2023, offers futures in compute linked to the value of chips in America. The firm has also recently launched a platform where model-makers bid to provide "inference"—the useful

output produced by an AI model in response to a prompt—rather than the underlying compute capacity. Brett Harrison, the company's founder and boss, believes that inference may prove easier to standardise than compute.

Given the uncertainty surrounding the all-new market, it is attracting risk-takers. Many, including Mr Harrison, spent time in crypto, once the most compute-intensive enterprise out there, which attracted financial engineers trying to turn processing power into a tradable asset. Mr Harrison was president of FTX US, the American arm of the crypto exchange founded by Sam Bankman Fried, resigning two months before the parent firm's bankruptcy amid fraud in November 2022. Luxor once primarily served bitcoin miners. One of Anera's co-founders, Vishwa Naik, was a crypto entrepreneur. (CoreWeave and some other neoclouds also began life as crypto-mining businesses.)

AI's finance bros

As opportunities grow, established financial companies are taking more of an interest. DRW and Jump Trading, two large market-makers, have both invested in Silicon Data, the compute-focused research firm with which CME hopes to launch its futures. Each market-maker has also assembled its own team to trade the new commodity. This month Jump Trading acquired Ito Markets, a compute-trading startup, whose founders will lead its efforts to break into the new industry.

David Olsen, Jump's investment chief, points out that the market will grow more rapidly with the right institutions, such as clearing houses that limit the risk of blow-ups by ensuring that contracts are honoured by both sides of a trade. "We're a long way from that," he acknowledges, echoing many in this industry who think it may take years or even decades for the market to mature. "But," he adds, "we want to be part of that discussion."

His desire is unsurprising. After all, with surging demand for what remains a scarce commodity, and with so many businesses around the world exposed to it, the prize is enormous.

Mr Naik of Anera, who in his pre-crypto days was an oil trader at Reliance Industries, an Indian conglomerate, likens today's moment in the compute market to the last days of the "seven sisters", a cartel of Western giants that ruled the global petroleum trade between the late 1920s and the 1970s. Their chokehold was broken by nationalisation (in many exporting countries) and the rise of the open oil market (just about everywhere). As governments covetously eye the AI labs and ventures like Anera attempt to create a market from scratch, you do not need to squint too hard to see a similar future for compute. ■

Brazil's weird economy

A real problem

SÃO PAULO

Neither presidential candidate has the stomach for serious reform

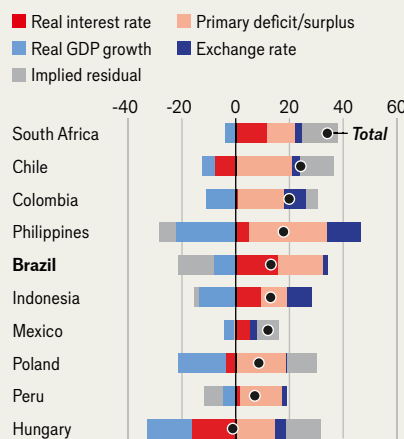
DEMOCRATS OF THE world shuddered after the first round of Brazil's presidential election. Flávio Bolsonaro, son of a coup-plotting former president, unexpectedly beat the incumbent, Luiz Inácio Lula da Silva. He looks poised to carry the run-off against Lula, as the 80-year-old leftist icon is known, on October 25th. Capitalists, too, trembled—but with excitement. São Paulo's stock-market index jumped by nearly 8% the next day, the real strengthened and yields on government bonds fell.

This was a brutal verdict on Lula's economic stewardship. GDP growth has beaten (glum) forecasts, unemployment is low and inflation has stayed close to the 1.5-4.5% range targeted by the Central Bank of Brazil (BCB). But his fiscal abandon and anti-business rhetoric spook markets. The "primary" budget surplus (ie, before interest payments) he inherited is now a deficit and the IMF expects public debt to hit 97% of GDP this year, up from 84% in 2022. "We need to put an end to all this nonsense of running a surplus and maintaining fiscal discipline," he recently averred.

Mr Bolsonaro, by contrast, styles himself on Javier Milei, Argentina's chainsaw-wielding president whose free-market reforms have led to some success (and lots of pain). He, too, uses a cutting tool—a giant pair of scissors—as an electoral prop, vowing to slash taxes, red tape and graft. Yet his economic ideas are hazy. To offset his ▶▶

Way too interesting

Contributions to change in debt-to-GDP ratio, 2015-25, percentage points
Selected countries



Source: Capital Economics

▶ proposed tax cuts and 900bn reais (\$179bn, or 6.6% of GDP) over four years in infrastructure spending, he wants to reduce the number of ministries, digitise public administration and sell federal buildings.

This is implausible—he would be lucky to get half his promised savings from such tinkering. It is also unequal to the task. It would take true Milei-like ardour to slice through Brazil's economic troubles. These are caused by a gnarly mix of high public spending, stubborn inflation and low saving. The result is a crippling cost of capital. Some analysts put Brazil's real interest rate, the BCB's policy rate adjusted for next year's expected inflation, at 9% or more. That is higher than in Russia and four times that in peaceful peers like Chile, the Philippines or South Africa.

It all starts with the public finances. Brazil's 65,000-word doorstop of a constitution bars cuts to nominal public-sector wages and links pension, disability and unemployment benefits to the minimum wage, which is adjusted annually based on recent inflation and GDP growth. This ratchet has lifted mandatory spending to 90% of the federal budget.

It also perpetuates inflationary pressure. This plus a generous welfare state in turn make Brazilians unwilling to save. At 14% of GDP, the national savings rate is 12 percentage points below the world average. If price rises have regularly eroded your bank balance in the past and the state pays for your health care, school and pension, you may as well spend all the money you make right away—especially if, like most people in unequal Brazil, you do not make much to begin with.

No government in recent memory has had a serious go at belt-tightening. And Lula has been no less loose. He has repeatedly allowed the minimum wage (and so everything linked to it) to rise above inflation. He has also splurged nearly \$260bn on cheap credit for arms-, chip- and drug-makers, among others, with little to show for it—between 2022 and 2025 industry shrank as a share of GDP. When he was still trying to balance the books earlier in his term, he raised taxes, piling more woe onto already woebegone businesses.

Lula's stimulus also meant that the BCB had no choice but to raise interest rates. And because nearly half of all lending in Brazil is subsidised—including most mortgages, loans to farmers and infrastructure credit—the hikes must be higher than in other countries to have the same cooling effect on prices. Between mid-2024 and mid-2025 the policy rate rose seven times, to 15%. Though it has come down to 13.8%, it remains as high as it got in the wake of the post-pandemic price surges.

High real interest rates raise the cost of servicing public debt and push up the debt-to-GDP ratio (see chart on previous

page). And with such juicy returns on offer, investors prefer to lend to the government, which for all its flaws seems a safer bet than most companies. This raises the cost of capital for everyone else. It also creates perverse incentives in the financial system, explains Monica de Bolle of the Peterson Institute for International Economics, a think-tank in Washington. Around half of government debt consists of floating-rate treasury bills (known as LFTs), which pay a daily return based on the BCB's policy rate. Commercial banks have balance-sheets full of this easy money. The BCB could thus be cutting rates less than it otherwise might, for fear that deeper cuts hurt lenders' profits and provoke a banking crisis.

LFTs blunt monetary policy in another way. Coupon payments to the banks and wealthy Brazilians who own them under-

cut the cooling effect on consumption that tightening aims to achieve. "The more I raise interest rates, the more income holders receive," the BCB's president, Gabriel Galipolo, complained earlier this year.

The one way out of the mess is through belt-tightening. It would bring down inflation, lower the real interest rate and make capital available for productive uses. Mr Bolsonaro's team whisper about reform but the candidate himself has rejected changes to pensions or indexation. If Lula pulls off a surprise comeback in the runoff, he is unlikely to discover his inner fiscal hawk. And any president would struggle to persuade three-fifths of both houses of Congress required to dismantle the constitutional ratchet. Markets may prefer Mr Bolsonaro to Lula. Whomever they get will turn out to be a disappointment. ■

European dealmaking

Commerz all'italiana

BERLIN AND MILAN

Italians are eating up German banking and business

“DIE ITALIENER kommen”, screamed a headline in June in the *Frankfurter Allgemeine Zeitung* (FAZ), a normally sober German daily. The Italians in question are not tourists coming for German sights or workers coming for German jobs. Rather, despite what the FAZ calls Italy's “lower economic prestige”, it is Italian banks and businesses salivating over the giant German market and its choicest cuts.

On October 15th UniCredit, Italy's second-biggest lender by assets and revenue,

said it got the nod from the European Central Bank (ECB) to seal a €45bn (\$51bn) hostile takeover of Commerzbank, its German opposite number. The banking deal is the biggest of recent Italo-German mergers. But it is part of a much larger feast.

Earlier this year Italo, an Italian high-speed railway operator, entered Germany. By 2028 it plans to challenge state-owned Deutsche Bahn along two lucrative routes: Munich-Cologne-Dortmund and Munich-Berlin-Hamburg. A year ago MediaForEurope, the empire controlled by the family of Silvio Berlusconi, a late former prime minister, paid €1.8bn for ProSiebenSat.1, Germany's second-biggest private broadcaster—and immediately replaced Bert Habets, ProSieben's Dutch boss, with an Italian, Marco Giordani.

Smaller Italian firms, meanwhile, are going after the *Mittelstand*. Last year the value of their foreign takeovers rose by 74%, to €24bn, according to Arkios, a Milanese investment bank. Germany is Italy's biggest trading partner and behind only America and Britain as a takeover target.

In 2025 Polifarma, an Italian drugmaker, bought Hennig Arzneimittel, a competitor from Frankfurt, and Bending Spoons, a collector of tech startups, took over Komoot, a German route-planning app. (Bending Spoons has just sold a big stake in itself to Berkshire Hathaway, a legendary American investment firm.) In December DIESSE and EsseEmme Tecno, two other medium-size firms, bought parts of ▶▶



Il Tricolore gets the green light

► Mayer, an insolvent German textile-machinery manufacturer, to get hold of its industrial-braiding technology. And in March an Italian maker of machinery, Danese, swallowed a German one, Zwaans.

The Italian appetite for German firms reverses a historical trend. It used to be the Italians with the brands and the Germans with the money. Volkswagen bought Lamborghini (sports cars) in 1998 and Ducati (sports bikes) in 2012. Allianz, a German insurer, picked up RAS, an Italian one, in 2005. HeidelbergCement (now Heidelberg Materials) absorbed Italcementi in 2016.

Such deals are not entirely a thing of the past: last year Lufthansa acquired a 41% stake in ITA Airways and says it will increase that to 90% next year. But as Germany's GDP has more or less stagnated since the covid-19 pandemic, more German companies, especially manufacturers competing with cheap alternatives from China, are receptive to foreign advances. As for the Italian acquirers, their domestic economy may have grown faster than Germany's in recent years, but it is hardly pizza-oven hot. A slice of Europe's biggest market, garnished with technology and engineering know-how, therefore looks appetising, says Jörg Buck of the German-Italian chamber of commerce in Milan.

This is not to everyone's taste. The German government (which owns 13% of Commerzbank) is revulsed by the desire of UniCredit's hard-charging boss, Andrea Orcel, to sack Bettina Orlopp, Commerzbank's chief executive—pronto.

It also dislikes the tactics Mr Orcel has used in his pursuit of Commerzbank. He built UniCredit's stake with the help of derivatives, which obscured his intentions. He also made a stingy bid for all shares his bank did not own just before its stake reached 30%. This let him circumvent the legal requirement to launch a full takeover bid on reaching 30% ownership while sidestepping the need to offer a decent premium such a bid would normally include. He could then keep buying up Commerzbank shares on the cheap in the open market.

The German finance ministry wants to change takeover law to prevent such “low-balling”, by requiring a second mandatory offer once an acquirer's stake in a target firm reaches 50%. At that stage, an acquirer forced to make a full takeover bid would find it harder to get away with a stingy offer. The ministry also wants stricter rules on acquirers' use of derivatives to build their stakes.

This looks like sour Riesling grapes. Even if the proposed rules were enacted, they would come too late to prevent the Commerzbank takeover—especially now that UniCredit has won the ECB's blessing. And they are unlikely to keep other Italians away. From the south, Deutschland AG looks just too delectable. ■

Japanese debt markets

For sale, going cheap!

TOKYO

Who will buy \$120bn-worth of fresh government bonds?

OF THE MANY reinventions of Suzuki Airi, a singer-turned-model-turned-actress, one stands out. In an ad campaign released earlier this year by Japan's finance ministry, an all-pink Ms Suzuki hawks government debt. Perched on her shoulder are the official mascots of its “retail government bonds plus” programme: Kokusai-sensei, a cartoon professor shaped like part of the Japanese word for government bond, and Koko-chan, his girlish companion. The pair encourages savers to “add peace of mind” with “plus-plus”.

Peace of mind is in short supply for those trading Japanese government bonds (JGBs) for a living. Last month the yield on ten-year JGBs passed 3% for the first time since 1996, up from 2% in January. Investors worry about persistent inflation—a novelty in a country until recently plagued by years of falling prices. This makes them less keen on government debt at a time when lots of bonds are hitting the market.

Takaichi Sanae, the prime minister, has pledged ¥120trn (\$700bn, or 18% of last year's GDP) in new public investment by 2040. She is backing strategic industries, from shipbuilding to chipmaking, while raising spending on defence and cutting sales taxes on food. Her promises to do all this without funding government budget deficits through new bonds are taken with a generous dash of soy sauce. Goldman Sachs, a bank, expects that a “primary” deficit (before interest payments) of 1.5% of GDP will raise total JGB issuance by ¥19trn in fiscal year 2027. And investors also have their pick of corporate bonds, a record ¥17trn-worth of which was sold in the 12 months to March.

Who will buy all that? The usual buyers are not as reliable as they once were. Life-insurance companies, which bought loads before new accounting rules for assets took effect in March, have gone quiet. The Bank of Japan (BoJ), which owns 44% of all JGBs, is unwinding a balance-sheet bloated by more than a decade of bond-buying.

To help digest the rising supply, the government is targeting new sources of demand. One is the Government Pension Investment Fund (GPIF), the country's \$1.9trn nest-egg. After a raft of economic reforms in 2014, low-yielding domestic bonds fell to a quarter of its portfolio, down from two-thirds in 2012 (see chart, left panel). The finance minister says that GPIF should make “substantially greater investments” in domestic assets. Were it to raise its domestic-bond allocation to 30% or so, as the current rules allow, that could create another ¥15trn in JGB demand, estimates Morgan Stanley, another bank.

The bigger potential pool of buyers are the everyday investors wooed by Ms Suzuki and her two sidekicks (see chart, right panel). They hold more than ¥1,100trn (around 165% of GDP) in cash savings in bank deposits, against ¥22trn in JGBs. Given that a two-year lockup deposit now returns around 0.7% a year, households may well be tempted by the 2% on offer from retail JGBs. Were they to raise their JGB allocations back to 4% of savings, the level in the late 2000s, from 2% today, it could create perhaps ¥20trn in fresh demand.

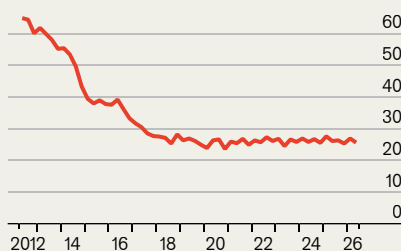
Yet both of these sources of demand face barriers. GPIF targets nominal investment returns of around 5%, higher than the 4% from the highest-yielding JGBs (with a maturity of 40 years). A bigger JGB allocation therefore risks undercutting GPIF's goals. Savers, for their part, are sceptical that retail JGBs will protect their cash from inflation. “The state is trying to generate inflation so it can recover its debt while encouraging ordinary people to buy government bonds. It's a trap, really,” warns Yohei, a Japanese fin-fluencer.

The government's retail-JGB push is ►►

One nest-egg, more baskets

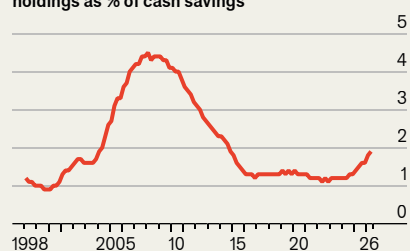
Japan

GPIF* assets held in domestic bonds, %



Sources: GPIF; Haver Analytics

Households' central-government bond holdings as % of cash savings



*Government Pension Investment Fund

▶ also in tension with NISA, popular tax-free stock-investing accounts. Though some politicians want to make JGBs eligible for NISA, that would muddy the programme's aim of creating more home-grown risk capital that Japan has lacked lately.

Japan may, then, have little choice but to rely on the flightier demand from abroad. Hedge funds and other foreigners are buying 60% of JGBs on the secondary market, up from 36% in 2019 (excluding those sold to middlemen). In general they

drive a harder bargain. Thankfully, though, they are drawn by Japan's "yield curve", the interest rates at which the government borrows over different time periods, which is one of the world's steepest. Japan's ten-year yield is 1.6 percentage points higher than its three-month yield. In America, the gap is around half that.

A steep yield curve appeals to foreign investors. A bond's local-currency returns depend on its yield, which is rising for longer-duration JGBs, whereas the cost of

hedging currency risk is set in part by differences in short-term rates, which have not moved enough to offset the yield gains. A currency-hedged American investor buying JGBs would now earn about 0.8 percentage points of additional returns above the equivalent Treasury bond, estimates Ralf Preusser of Bank of America. Having to compete for flighty foreign capital may feel uncomfortable for a country accustomed to sleepy bond markets. But at least Japan has something to offer. ■

BUTTONWOOD

The course for par

Perry Mehrling, who died this month, explained the hierarchy of money

THERE IS A moment in Perry Mehrling's opening lecture on money and banking, a course he taught for years at Barnard College in New York, when the professor recalls the origins of his intellectual passion. (Thanks to the magic of the internet, the recording is available for anyone to watch.) His eyes light up. His enthusiasm is laid bare. He went to the library, he remembers, saw a shelf full of treatises on money, and said to himself, "If I could have a life reading all of those books, just from left to right, that would be the best life ever."

His best life set him apart from most mainstream economists. They read articles, not books. And their intellectual framework leaves surprisingly little room for money. They care about the production and exchange of stuff, not the pieces of paper that change hands along the way. A famous couplet sums up their creed: "promises of payment/Are neither food nor raiment".

But if you have made a promise of payment, you will need money, not food or raiment, to fulfil it. That "settlement constraint" is a starting point of Mr Mehrling's own school of thought, which he called "the money view". It is a little school, he admitted. But he did not feel alone. He drew on a shelfful of intellectual ancestors, such as Hyman Minsky, a maverick American economist, and Walter Bagehot, the third editor of this newspaper. ("They're pretty great guys, actually," he assures his lecture audience.) He also inspired other adherents, such as Daniel Neilson, a data scientist, and Iñaki Aldasoro of the Bank for International Settlements, whose own interpretation, dedicated to Mr Mehrling's memory, was published this month, shortly after the professor's untimely death at the age of 67.

According to this tradition, money evolves out of promises of payment. Suppose I owe you something. Perhaps that obligation is written on a piece of paper. If you trust me, you might accept that paper in lieu of immediate satisfaction of my debt. You might even try offering it to someone else to clear a debt of your own. If they too trust me—or feel confident that everyone else does—they could take my paper from you as settlement of your obligation to them. My IOU begins to circulate like money.

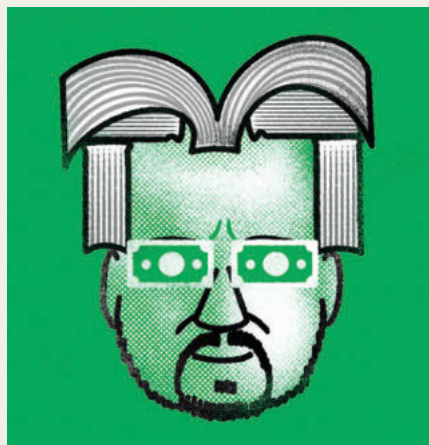
A complex, hierarchical apparatus ensures that some promises are routinely accepted as money. Mainstream economists concentrate on only a few parts of this system. They obsess over the policy rules that curb inflation, ensuring that money holds its value against goods and services. Mr Mehrling was fascinated by the rest of the plumbing. What, he asked, ensures that the dollars in a bank account, a money-market fund or an offshore deposit hold their value, at par, with higher breeds of promise, such as reserves at the central bank? He treated "par"—the one-

for-one exchange rate between different kinds of dollars—as one of "four prices" of money, as important as the familiar trio of the interest rate, exchange rate and price level of goods and services.

Par normally attracts little attention. The public is so confident it will hold, they barely know it exists. In good times banks happily extend loans and create deposits, adding new promises to pay. This "elasticity" helps the economy flourish. But it can create strains. And the scale of the system is not the only thing that grows. Its scope also expands. A wider range of actors issue a more exotic mix of claims in the hope they will circulate like money, with few questions asked. One historical example is the Eurodollar market created by offshore banks. Money-market funds are another. The "latest iteration" of this pattern, points out Mr Aldasoro, are stablecoins, crypto instruments that try to keep par with established currencies.

But when confidence is shaken, par is tested. Institutions that issue lower forms of money often cannot survive this test alone. They have to turn to institutions higher up the hierarchy for help. In the global financial crisis of 2007-09 foreign banks, issuing dollar claims, turned to their local central banks, which in turn received help from the Federal Reserve. When stablecoins have faced a similar test, they have so far had nowhere to turn. But the monetary apparatus may eventually domesticate them, too.

Mr Mehrling will sadly not be around to document this evolution. During his career he published four books of his own. Another treatise setting out his money view remains half-written. Perhaps it will still see the light of day in some form. There is room on that shelf of monetary classics for more.



FREE EXCHANGE

Shock, shocked?

New research asks just how traumatic the “China shock” really was



IN AMERICA THE left and the right agree on little. But from the deepest-blue city to the reddest-of-red hamlet, almost everyone agrees that America suffered a “China shock” in the 2000s. Joe Biden’s top economic adviser said that surging Chinese imports had destroyed “nearly 1m” manufacturing jobs. Scott Bessent, Donald Trump’s treasury secretary, said last year that it was 3.7m American jobs. The economic research on which such claims are (in Mr Bessent’s case loosely) based is hugely influential. Yet it is controversial, too—and the argument about what exactly trade with China did to America’s economy is now hotting up once again.

The seminal paper was published in 2013 by David Autor, David Dorn and Gordon Hanson, a trio of academic economists. It examined what happened around China’s accession to the World Trade Organisation (WTO) in 2001. Chinese imports flooded into America; manufacturing jobs fell. But was it China that made the difference? To work this out, the authors estimated the exposure of local areas to the shock based on the rise in industry-specific imports from China in other rich countries. So a place with many toymaking jobs, for example, was treated as vulnerable if imports of Chinese toys were surging in the rich world as a whole.

Their estimates implied that exposure to Chinese goods accounted for about a quarter of the fall in manufacturing employment from 1990 to 2007. Besides shut factories, affected areas were found to have lower wages, higher overall joblessness and more benefit claimants. Early drafts of the paper, circulated in 2011, came close to saying the overall costs of trade with China exceeded the benefits.

The findings became gospel among talking heads seeking to explain the rise of Donald Trump in 2016. They have also been pored over by economists. Some noted that, though the numbers seem large, they are a rounding error in an economy the size of America’s. Since 2001 Americans have left jobs more than 1.5bn times. Even if Mr Bessent is correct and China has cost America 3.7m jobs over 25 years, almost all job moves had nothing to do with it. In the 20 years before 2001 the share of American workers in manufacturing fell by 0.4 percentage points a year. In the ten years after 2001, it fell by roughly as much.

Other critics argue that the China-shock literature considers only the bad, not the good. Bits of research suggest that some places exposed to China lost jobs in manufacturing but gained others in services; that cheaper imports reduced American businesses’ costs, allowing them to expand; and that China’s accession to the WTO was a two-way street, giving American exporters better access to the Chinese market and boosting jobs that way.

The fiercest battle of all has been fought over the methods of the original paper. Its probably most-quoted statistic—that quarter of manufacturing job losses caused by Chinese competition—was an approximation. The authors’ statistical wizardry captured the relative effect of the China shock in different parts of America, not the aggregate national impact. The paper acknowledged that scaling the numbers from local to national required some crude assumptions—a caveat that commentators often ignored. Subsequent “general equilibrium” analysis seeking to identify the national effect produced a lower figure. In a paper from 2019 Lorenzo Caliendo of Yale University and co-authors estimated that the China shock explained 16% of manufacturing jobs lost between 2000 and 2007.

Then there is the question of whether Messrs Autor, Dorn and Hanson blamed China for destroying manufacturing jobs that were on the way out anyway. In 2022 Kirill Borusyak of the University of California, Berkeley, Peter Hull of Brown University and Xavier Jaravel of the London School of Economics showed that the original study inadvertently treated places as exposed to the China shock simply because they had a lot of factories. It might thus have picked up job losses in reality caused by a surge in sector-wide forces like automation. Controlling for this problem cut the effect of the China shock on employment roughly in half.

In a new paper Joseph Francis of Birmingham University extends this method to the supposed socioeconomic fallout of the China shock. Apply the statistical correction of Mr Borusyak and his colleagues, and these broader effects of the shock “disappear”, writes Mr Francis. Chinese imports are no longer proven to have pushed down household incomes; the impact on health, family structure and welfare payments looks smaller.

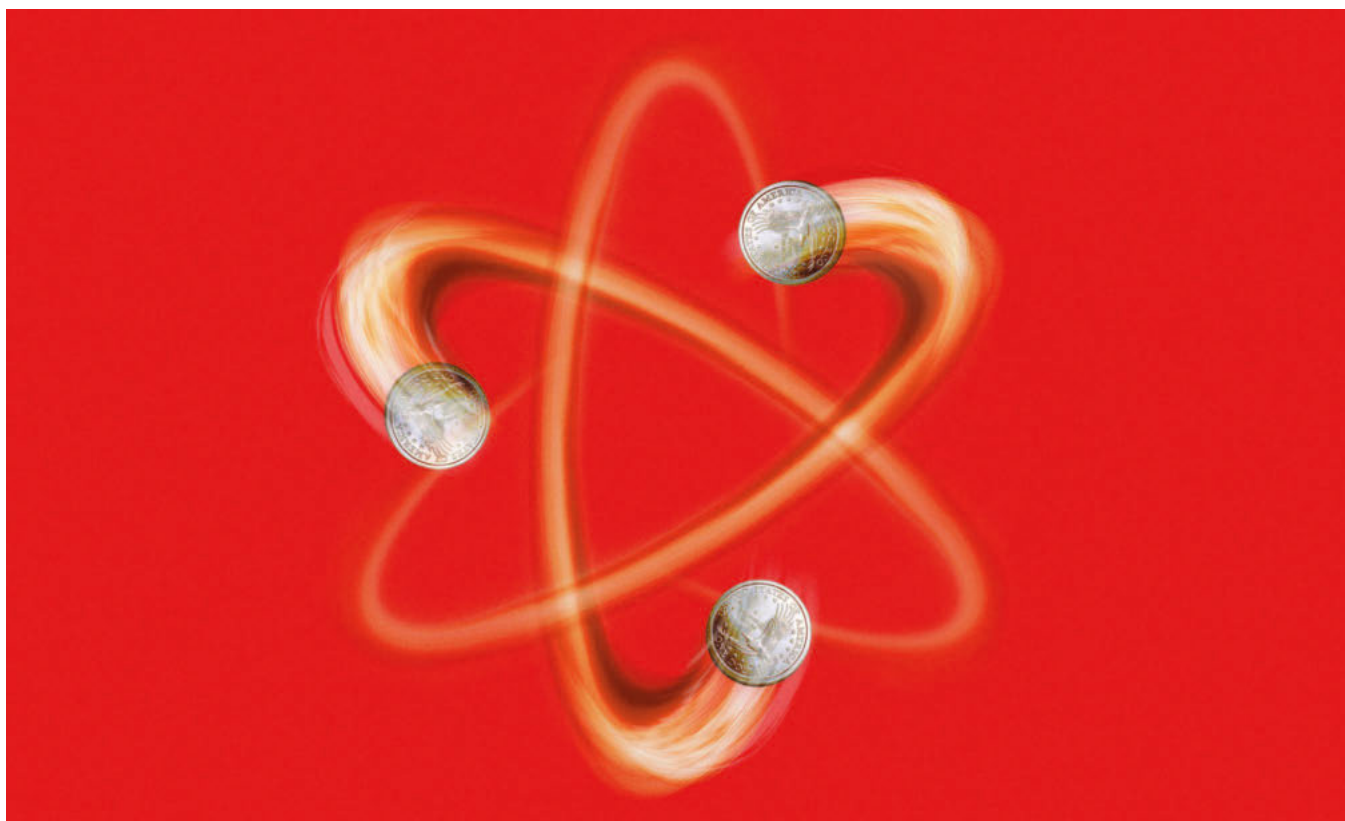
Messrs Autor, Dorn and Hanson say there is “no consensus that this specification is more appropriate than ours”. However, Mr Hull “strongly” believes that his and his co-authors’ approach is more appropriate, and points out that it “has been peer reviewed and published in two high-profile journals”.

Pallet cleanser

Perhaps the two approaches put an upper and lower bound on the size of the China shock? The new statistical controls cleanse the numbers of trends, like automation, that might have affected all manufacturing-heavy places. However, the China shock probably had some across-the-board effect, too, which is no longer counted. Messrs Autor, Dorn and Hanson insist that “our core findings do not depend on the contested specification.” They point to other work tracing the misfortunes of individual factory workers after the China shock via tax and other administrative records.

It seems undeniable that the China shock destroyed jobs and hurt some workers. Yet the finding that it caused one in four manufacturing jobs lost from 1990 to 2007 has not aged well. Neither has the populist turn against free trade that began around the time of the original research—and for which doubtful claims about the shock’s size have, alas, provided intellectual cover. ■

Science & technology



Science funding

Back to the bench

America is entering a new era of private science

THE YEARS since the second world war have been good to American science. The country's researchers sent men to the moon, invented the modern computer and led the sequencing of the human genome. Its government funded basic research in academia and national labs, which could then pass on findings with commercial promise to firms.

Now there are signs the innovation machine is breaking down. The system's critics fret that America's scientific infrastructure encourages groupthink, since a small number of committees distribute a large share of funding for basic research. They worry that universities are ill-suited to the interdisciplinary work that much of 21st-century science requires. And America is no longer an undisputed scientific superpower: China's research and development (R&D) spending has caught up with Uncle Sam's in purchasing-power terms, and is growing faster. In 2024 China over-

took America in the *Nature* Index, a measure of publications in the most prestigious scientific journals.

Advocates of "metascience", the study of scientific discovery, have spent years pointing out the foibles of the system. Lately they have been putting their ideas into practice. Private institutions, many of which were founded within the past five years, say they are building the future of science. The history of American innovation suggests they may be right.

Private science is nothing new. Many of the most exciting American discoveries of

the 20th century were not dreamt up on university campuses, but within corporate research institutes. Scientists at Bell Labs (the research arm of AT&T), Xerox PARC (the copy-machine maker's lab) and IBM Research came up with such marvels as the transistor, and won a handful of Nobel prizes in so doing.

Yet for all their successes, private labs failed to justify their upkeep. A paper published in 2004 by William Nordhaus, an economist at Yale University, estimated that, in the post-war period and across the whole economy, just 2.2% of value from innovation flowed to firms. In response, companies transitioned to "R&D by M&A," buying startups spun out from universities rather than funding their own labs.

Corporate labs' retreat led basic research to become much more reliant on government-backed efforts. In the view of private-science advocates, that is lamentable. The concentration of science funding means fewer innovative ideas can benefit society at large, says Caleb Watney of the Institute for Progress, a think-tank. To wit, a study of 100,000 National Institutes of Health (NIH) grant applications, conducted in 2025 by Pierre Azoulay of the Massachusetts Institute of Technology and Wesley Greenblatt of Harvard Medical School, found that projects which took out-of-consensus approaches were less likely to have

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► their funding renewed. And seeking funding is onerous. According to one survey, researchers spend about 44% of their time doing administrative tasks like writing proposals and reports.

To illustrate these issues, many cite the example of Katalin Kariko, a biologist whose work provided much of the science underpinning mRNA vaccines, such as those for covid-19. For decades funders, notably the NIH, rejected her proposals, considering them too risky. She happened to stay in science, but not many in her position would have, says Stuart Buck of the Good Science Project, a lobby group.

Such concerns have made their way from metascientists' lips to powerful ears. On July 21st the American government released a report arguing that universities should not be "the only home of America's most innovative scientific research". Instead, funding agencies should act more like venture capitalists, betting on a wide variety of institutions.

Sovereign science

As part of this push, the National Science Foundation (NSF) is to allocate \$1.5bn to a first round of "x-labs", new organisations that "advance breakthrough science outside of traditional institutions". A bipartisan bill in Congress would create a similar initiative at the NIH, which has a much larger budget, notes Josh Harder, a Democratic representative and one of the bill's sponsors. Other changes would see federal agencies offer "golden tickets" to oddball projects that a committee would never back, or begin to give long-term money to individuals rather than projects.

Such ideas have discomfited scientists because of their source. As it attempts to spark "a new golden age" for American science, the Trump administration wants to fund it less. The White House's proposed budget for fiscal year 2027 suggests halving the NSF's budget. The worry is that the combination of less funding spread across more institutions will lead to university labs losing out.

Michael Kratsios, the White House science czar, says he "disagrees with that premise". He notes that the administration has suggested boosting overall R&D spending, particularly in defence. (Defence-department programmes have spurred innovations such as epipens, bug spray and self-driving cars.) Nor does he think the bottom line is the right way to measure policy. Science advocacy groups "have this extreme fixation on budgets", he says. "Academia just needs to get out of this zero-sum mindset."

But separately from such squabbling, many private science experiments have already begun. One of the most notable of these is Convergent Research, a Massachusetts-based nonprofit founded in 2021

to fund "focused research organisations" (FROs). Its grantees often want to create a specific tool rather than answer a purely academic question, say co-founders Anastasia Gamick and Adam Marblestone. Convergent gives researchers \$20m-50m and between three and seven years to carry out their project. Afterwards, its staff will help them decide what to do with the results. One FRO creates sets of tools that labs and companies can use to study non-model organisms. Another produces an interface that uses ultrasound waves to read brain activity.

Another entrant to the world of private science is Episteme, a company launched in 2025 by Sam Altman of OpenAI and Louis Andre, then a little-known researcher. Rather than demanding pre-set targets or papers, Episteme hopes to give its lead researchers near-total freedom. While the select few it funds often have an approach in mind to solving their chosen problem, Episteme offers them the flexibility to adapt. "If an idea fails, which in science is something that happens very often, you should be able to pivot and try a different angle," says Mr Andre.

The approach is an appealing one. Charles Marcus, a physicist, says he left a tenured position at the University of Washington to work at Episteme because he felt it would enable him to work across disciplines without needing approval from staid bureaucrats. "We're not building academic departments in which nobody talks to each other," he says. Nor will he and other lab leads need to apply for grants or wait for months to hire junior researchers. And while publishing papers is encouraged, it is not mandated. The main constraint on their work is that it should represent a commercial opportunity.

Many important questions fall outside that scope and will have to remain within universities. And besides, not every attempt at private science has flourished. Arena BioWorks, a private biomedical institute founded in 2023, shut down after less than two years. But whereas Arena's funders reportedly expected quick payouts, Mr Andre says his backers, who have funded Episteme from their personal fortunes, are committed for the long haul. And Episteme, unlike Arena, is not betting on one specific area of research, either. "If a programme fails, it's okay. We can recycle it and repurpose the resources into something else," he reckons.

Between federal support, independent experiments and a coming wave of AI-fuelled cash, private-science initiatives are "seeing the stars align," says Mr Marblestone. Historians of science and technology argue the post-war system cemented American hegemony. In the bet on private science the stakes are high, both for boffins and for America. ■

Space exploration

Phobophiles

TOKYO

Japan heads to Mars's moons

ORBITERS, LANDERS and rovers have travelled to Mars, but none has returned. The Japan Aerospace Exploration Agency (JAXA) intends for that to change. On October 20th its Martian Moons eXploration (MMX) mission lifted off from Tanegashima, an island in southern Japan. The probe will spend the next year travelling to Mars, where it aims to land on Phobos, the larger of the planet's two moons, collect at least ten grams of rock and dust, and return the haul to Earth in 2031. Planetary scientists hope the mission will resolve a long-standing puzzle: how Mars's moons were formed—and, in the process, reveal much about the planet itself.

Phobos and Mars's other moon, Deimos, are small, respectively about 22km and 12km across, and look like lumpy potatoes. That might suggest they are asteroids that were captured by Mars's gravitational field after straying too close. Captured asteroids, however, usually have tilted, elliptical orbits, whereas both moons follow nearly circular paths around the planet's equator. That hints at another possible origin: a giant collision that threw debris into orbit that later gathered into moons.

JAXA has spent over a decade developing MMX, working with the space agencies of America, Europe and Australia. The mission builds on Japan's record of returning samples from space. Its Hayabusa mission collected small amounts of grains ►►



Moonshot

► from Itokawa, an asteroid which comes close to Earth, and brought them home in 2010. Its successor, Hayabusa2, brought back five grams of material—well above the mission's target—from Ryugu, another near-Earth asteroid, in 2020. The samples proved rich in water-bearing molecules and organic compounds, offering clues to how asteroids may have carried the ingredients for life to Earth.

MMX's mission is more demanding. Phobos's surface gravity is roughly one-2,000th of Earth's, but it is 40 times greater than Ryugu's. That is strong enough to pose a crash risk for a delicate spacecraft, explains Erik Asphaug, a planetary scientist at the University of Arizona. The Hayabusa missions also followed a "touch-and-go" method in which the spacecraft briefly kissed the asteroids. In contrast, MMX will land on Phobos and extract samples from beneath its surface.

And MMX's makers want to do a lot more during its three years orbiting Mars. An instrument called MEGANE (pronounced "meh-gah-neh", like the Japanese word for spectacles), developed by NASA, will measure gamma rays and neutrons given off when cosmic rays hit Phobos, thus revealing its chemistry. A small European rover will explore its surface. After departing Phobos, MMX will conduct fly-bys of Deimos to observe it, too, up close.

If the samples make it safely back to Earth, scientists reckon they might settle which of the two origin stories is true. If Phobos is a captured asteroid, its rocks may resemble meteorites from elsewhere in the solar system. If it instead formed after a giant impact, it will contain melt fragments generated by intense heating.

Whatever Phobos's history, its proximity to Mars means it should also have collected material blasted off the planet by asteroid impacts. Martian debris should make up about 0.1% of the samples MMX collects. Scientists already have Martian meteorites, but these are mostly hard volcanic rocks that survived the journey through space and Earth's atmosphere. Sara Russell, a planetary scientist at the Natural History Museum in London who will help analyse MMX's samples, hopes the mission could recover softer sedimentary material. "That's the material where we might see biosignatures," she says, offering clues to whether Mars was once habitable.

There is reason to wonder. Ancient riverbeds and lake deposits suggest Mars once had liquid water and a thicker atmosphere. Unlike the planet itself, its moons have undergone little geological change. They may therefore have preserved fragments of that distant past like a time capsule, says Elizabeth Tasker, an astrophysicist at JAXA. The two small moons could thus help answer a much bigger question: whether life existed on the red planet. ■

Metrology

Second thoughts

The world's metrologists plan to redefine time

IT TAKES ABOUT a second to say "caesium atoms". And, for nearly 60 years, caesium atoms have said how long a second lasts. That is because caesium-133, an isotope of caesium, switches between two energy states when exposed to microwave radiation, at a rate so regular you could set your watch by it. Indeed, atomic clocks use this steady rhythm to measure time. According to the International System of Units, a second is 9,192,631,770 cycles.

But not for much longer. On October 13th the world's top metrologists convened in Versailles for the General Conference on Weights and Measures (CGPM), as they have done roughly once every four years since 1889, to discuss the science of measurement. After three days of debate, they set themselves a deadline: by 2030 they will decide how to redefine the second.

The CGPM oversees the International Bureau of Weights and Measures (BIPM), which sets the global standard for the passage of time. It does so by combining measurements from hundreds of atomic clocks based in laboratories around the world, to account for small fluctuations which can cause errors in each individual reading. The result is a single standardised time that co-ordinates everything from financial transactions to satellite navigation.

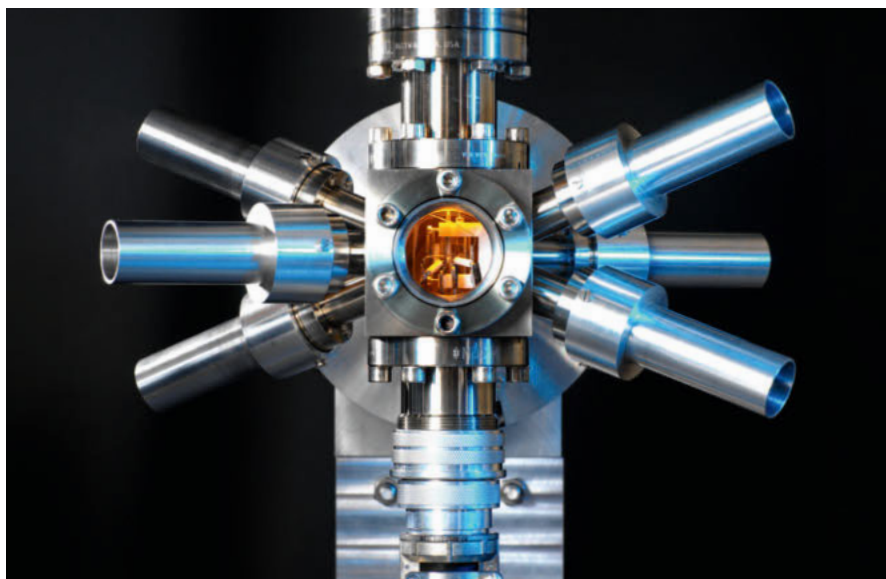
But the BIPM has a problem. To check the accuracy of its standardised time it uses a set of newer clocks, based on different

chemical elements, which can measure time more precisely than the best caesium clocks can. Checking the accuracy of the newer clocks requires a definition of the second itself. Using that from a caesium clock is like trying to measure the width of a hair using a ruler whose divisions are wider than the hair. To run the clockwork like clockwork the CGPM needs to untie the second from caesium.

Kyle Arnold, a physicist at the National University of Singapore, is part of a team developing a clock based on lutetium ions. While caesium clocks use microwave radiation to trigger transitions between the atom's energy states, Dr Arnold's device uses lasers. Such optical clocks "tick" more quickly, allowing time to be measured more finely. Writing in *Nature*, in September, Dr Arnold's group reported its lutetium clock had a tick about 1,000 times more regular than the best caesium devices.

Atomic clocks must work reliably in different places around the world. Dr Arnold's device, however, is the size of a room and yet to leave his Singapore lab. Other, more portable, contenders include optical clocks based on ytterbium and strontium atoms suspended by lasers. These come with their own issues. A study published in *Physical Review Letters*, in July, found that measurements comparing optical clocks based on these elements disagreed with earlier results by more than their known uncertainties could explain.

Metrologists must now decide which atomic transition is promoted to the official standard. That requires consensus among yet another team of time lords: the Consultative Committee for Time and Frequency, who are advising the BIPM and CGPM on the second's fate. With the deadline set for 2030, they have about 100m seconds to reach an agreement. ■



Watchmaker's precision

Cyber-security

Service
unavailable

A string of cyber-security incidents is menacing the internet

PITY THE cyber-defenders. Occasionally, the industry must burst into action following the unheralded revelation of a vulnerability in some widely used software. Rarely, however, must they do so a handful of times in the same week.

On October 20th the security teams at major web browsers received an unusual email. It read “we have a problem here” and was accompanied by a file containing eight private security keys: randomly generated numbers used to encrypt communications across the entire internet. Such keys should be 116 digits long to ensure security. Those in the email, issued by an Indian authority, were no longer than three. One was a private key of just “4”. To top things off, the email was signed simply “Wayne”.

Revoking such keys from important central databases is manageable. Checking every system has updated accordingly is hard work. Defenders were busily plugging those gaps when, on Wednesday morning, a distraction arrived. A pair of vulnerabilities had been exposed in PHP, a venerable programming language which underpins tens of millions of web applications, including message boards, financial portals and government websites. A patch was promised for Wednesday afternoon. In the meantime, affected organisations were advised to take their systems offline entirely—an instruction not issued lightly. Several government websites went dark.

The advice proved reasonable. Hours after news of the vulnerability broke, and with over 12 hours before a patch was due, its details leaked. The vulnerability was as bad as it gets: a recipe for unauthorised remote code execution, letting an attacker take control of machines running PHP. Exploiting the vulnerability, as demonstrated by at least one widely shared proof-of-concept, was simple.

As Wednesday turned to Thursday, two further vulnerabilities were published. One, affecting GitLab, a software development tool, ranked ten on a ten-point severity scale. All of the flaws appear to have been discovered by AI. In an effort to prepare defenders to install patches with alacrity, the bugs were announced before their fixes were ready. The debacle highlights an uncomfortable question about AI-powered cyber-security: with a plethora of weaknesses, how can defenders spread news of fixes to their users, without tipping off enemies in the process? ■

Well Informed

Can joggers outrun injury?

Patience when training goes the extra mile

KNEE PAIN in joggers is prevalent enough to be a term of art. “Runner’s knee”, an ache around the kneecap, was among the most common complaints in a study of 3,669 runners published in the *Orthopaedic Journal of Sports Medicine* (OJSM) in 2021. But it is only one of an assortment of “overuse” injuries: those caused by training that, though tolerable in parts, cumulatively exceed the body’s capacity to recover.

Such problems can compound. The study found that a previous injury increased the odds of another by 62%. Hence a widespread worry that a lifetime of running will wear down joints and eventually lead to arthritis. How can runners keep injuries at bay?

Throwing money at the problem does not help. A review published in the *Cochrane Database of Systematic Reviews*, in 2022, found little evidence that different running-shoe designs affect their owners’ susceptibility to injury. The OJSM study from 2021 concluded that stretching before a jog did not help, either.

Instead, when taking up running or increasing the distance covered, the old adage of “slow and steady” is the one to follow. Novices report injuries more than twice as often as experienced runners, according to a review published in *Sports Medicine* in 2015. Some of this may be down to differences in expectations, says

Rasmus Nielsen, an epidemiologist at Aarhus University in Denmark. A beginner might panic and report a twinge that a more experienced runner knows will pass on its own.

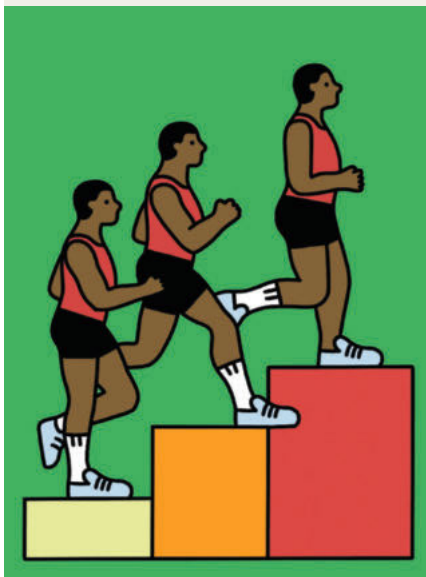
But doing too much too soon is a risk even for seasoned sprinters. A study of 5,205 runners published by Dr Nielsen and his colleagues in the *British Journal of Sports Medicine*, in 2025, found that running 10-30% farther in a single session than the previous month’s longest run was associated with a 64% higher rate of overuse injury.

Increasing training load slowly gives the body a chance to adapt. Using tendons stimulates collagen production, causing them to stiffen and thicken so that they are more resilient to strain. Repeated impact activates bone-strengthening cells known as osteoblasts, gradually increasing resilience to stress fractures. And, rather than damaging knee cartilage, running strengthens the muscles that help protect the joint.

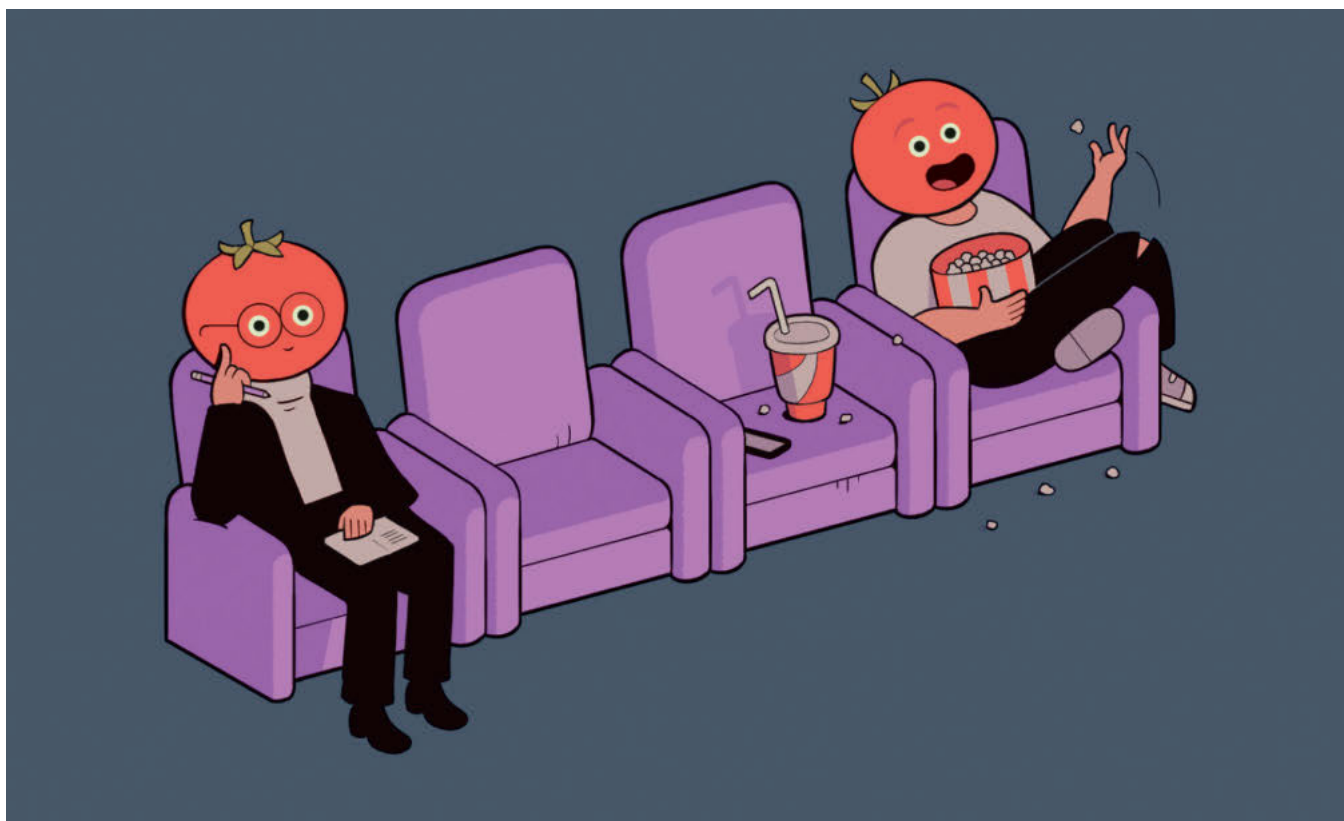
Building resilience takes time. Changes in tendons occurred in studies lasting around 8 to 12 weeks, according to a review published in *Sports Medicine* in 2015. Increases in shinbone density have been detected after eight weeks of intensive military training. Another study found that bone mineral density improved after six months of resistance and jumping training.

To be on the safe side, Dr Nielsen recommends keeping any single run to no more than 5% longer than the past month’s longest run, and that any week’s total not exceed 110% of the previous week’s. For beginners, particularly those with high body-mass indices or a history of injury, 3km of cumulative walking and running in the first week of training is a safe starting point.

Happily, there is little evidence that running is associated with long-term joint problems. A study of 3,804 marathon runners published in *Sports Health*, in 2024, found no association between running history and the risk of arthritis. Accidents involving the knee, such as tears in its cartilage, can cause persistent issues. But as Dr Nielsen points out, such injuries can strike anyone. With sufficient caution, joggers can keep going for the long run.



Culture



Entertainment

The good and the (not) great

Are film critics as snooty and out of touch as people think?

WHETHER A FILM is good enough to warrant a trek to the cinema is not always easy to ascertain. Recently viewers have praised “Digger”, a satirical black comedy about a wealthy oil tycoon whose company triggers an environmental catastrophe. It has a 76% audience-approval score on Rotten Tomatoes, a review aggregator. But critics did not dig the film: only 53% reviewed it positively, complaining it was ponderous and preachy. Fans calling themselves “Digger Nation” have mobilised online to defend the movie.

Signals about films’ quality can be confusing to decipher. In April fans judged a biopic of Michael Jackson to be a thriller, with 97% of them enjoying it. But most critics thought “Michael” was bad. In January “Melania”, a documentary about America’s First Lady, reflected the politically polarised times, with a 90-point gap. “An absolute masterpiece!” gushed one audience member. “Gilded trash”, said the *Guardian*.

Critics and audiences have often failed to see eye to eye. The history of film criticism is littered with judgments that aged badly. (Pity the reviewer who dismissed “Citizen Kane”, now considered one of the greatest films ever made, as “well-intentioned, muddled, amateurish”.) Today many think that critics seem out of step—perhaps more than ever before.

But are they really? To test whether critical and popular opinion are drifting apart, *The Economist* compiled two decades of re-

views of more than 10,000 films from Metacritic, an aggregator site. (We did not use Rotten Tomatoes because the website changed its audience-score methodology in 2019.) Then we matched the reviews with box-office data from The Numbers, a film-industry database.

Talk of a critic-audience divide, it turns out, is overblown. For most of the past 20 years, reviewers and moviegoers have been in broad agreement. Around a decade ago, their views began to diverge. But by 2025 critic and audience ratings were more aligned than at any point since 2005 (see chart on next page).

The real difference is not how critics and audiences rate films, but which films they rate. For every ten audience reviews of a documentary, there are six from critics. For dramas and comedies there are around three, and for action less than one. Foreign-language and low-budget films attract disproportionately more attention from critics than from audiences.

Critics and audiences may gravitate towards different films, yet their judgments often align. Between 2005 and 2016 the correlation between critic and audience scores—where zero implies no relationship and one means the scores move perfectly in step—averaged around 0.6. Then opinions began to diverge. Before 2017 a ten-point increase in a film’s audience score

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was associated with a ten-point increase in its critic score. Over the next six years, that figure fell to just eight points. The correlation between critic and audience scores also dropped from 0.6 to around 0.5. In short, critics' enthusiasm for a film told you less about how much viewers liked it.

To understand why, we tested a few hypotheses. The first was that the mix of films had changed, as film critics and audiences tend to agree more on some genres than others. But changes in genre, budget, sequel status and studio did little to explain the degree of disagreement.

In fact, much of the divergence happened within two of Hollywood's biggest categories: big-budget action and family films. Before 2017 critics' opinions of these films tracked audience opinions about as closely as they did for any other genre. Between 2017 and 2022, however, that relationship collapsed: critics' scores on such releases were a poor guide to how audiences would rate them. All told, we estimate that roughly 43% of the divergence between critics and audiences was concentrated in these two types of film.

Most industry experts attribute the deviation to franchise fatigue. "Film reviewers got tired of superhero movies before the general audience did," says Bruce Nash of The Numbers. "It gets boring," says Mattias Frey of City St George's, University of London, "if you're seeing 'Fast and Furious 23' or 'Avengers Part 27'."

Political polarisation may have also played a part. When studios cast more female and minority actors in big-budget franchises, or embrace "woke" themes—as Marvel Studios did with "Captain Marvel", its first female-led film, which was described as a "big feminist movie"—audiences tend to be more critical.

Since 2022 critics and audiences have found more common ground. Across all major genres, the correlation between their ratings now sits at nearly 0.7. Some reckon the film industry's woes may be a factor: reviewers may be going easier on films they would once have panned. "There is this

idea that there's an existential crisis in movies, and that may be changing the way critics operate," says Daniel Parris, a data scientist. James McMahon, an entertainment researcher, agrees: "As a critic, if you crap on every movie, you may be sinking the very thing that you really love."

Journalism's woes may be a factor, too. The era of the esteemed staff reviewer is long over. ("The Last Movie Critic", a documentary about Roger Ebert, puts it bluntly.) Publications have laid off scores of arts journalists; those who remain must compete with influencers and podcasters to take part in the cultural conversation. They cannot afford to ignore the biggest block-

busters—or write only for the cognoscenti.

All this raises the question of what film critics are for today. Our data suggest they still have commercial clout. We found that higher critic scores are associated with significantly higher ticket sales in America, even after controlling for factors including genre and budget.

Their allure is also intellectual. Critics "get you thinking about things that you might not have thought about", says Kevin Goetz, an entertainment researcher. Many read reviews only after they have seen a film as a way of extending the experience, positive or negative. Everyone can appreciate a good roast. ■

Novelty collectibles

Kernel of an idea

Popcorn buckets are the latest must-have movie memorabilia

THE NEW "Resident Evil" film depicts a work assignment from hell. Bryan, a medical courier, is asked to deliver a package to a hospital in the mountains; on the way, he has to fight off mutant dogs, rats and people infected with a zombification virus. Fans have been coughing up around \$20-25 for the official popcorn bucket, which takes the form of Bryan's green, bespattered courier bag. (Talk about a bloody good snack.) It has sold out in many cinemas.

Popcorn buckets are popping off. AMC, a cinema chain, has estimated they will bring in \$100m in revenue this year, almost double the amount in 2023. "The Odyssey" had buckets shaped like a Trojan horse (for a cool \$70) and an IMAX film camera (\$50). "Spider-Man: Brand New Day", this year's top-grossing film so far, offered fans the opportunity to dip into a tin shaped like the titular superhero's head. "The Devil Wears Prada 2" went for a chic red handbag.

These novelty collectibles first went viral in 2024, with the bucket created for "Dune: Part Two". Inspired by the sandworm that lives on the fictional desert planet of Arrakis, it featured a toothy creature emerging from the dunes. Some, however, felt it resembled a sex toy, and it was lampooned on "Saturday Night Live" and a late-night talk show. (It has become something of a cult item, having listed for \$40-800 on resale sites.) Zinc Group, the marketing firm behind the dubious design, did not see the memes coming.

It was the enthusiastic reaction to a "Star Wars" R2-D2 collectible in 2019 that

showed how turning a quintessential element of a film into memorabilia can delight fans. "It's about the tangible experience with the movie that you're going to see," says Marcus Gonzalez, global creative director at Zinc. Creative keepsakes help fans feel connected with the film long after the credits roll.

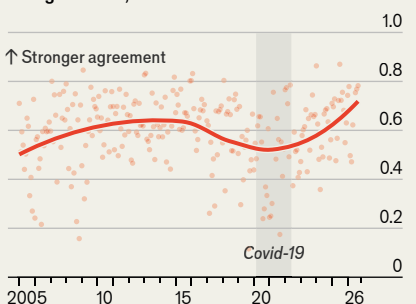
Popcorn buckets are a "status symbol", argues Calvin Innes, a creative strategist. Well, sort of. Often there is a limited supply, meaning that people who rush to the cinema on a film's opening weekend are more likely to get their hands on one. Owning a limited-edition item signals to other obsessive fans that you are one of them.

The hype is great news for cinemas, which need to lure customers. Concessions—food and drinks—allow them to squeeze more profit from every moviegoer and popcorn buckets are a way to turn fans' enthusiasm into high-margin sales. For Vue, a British cinema chain, sales of collectible merchandise have increased ten-fold since 2023.

Design is key. A "well-executed popcorn bucket is a really delightful kind of object" to people of all ages, avers Tim Sparrow, director of retail at Cineworld, another chain: it makes the film experience "so much richer". The best popcorn buckets turn a movie reference into something playful and nostalgic. They have become such a successful marketing tool that fans are almost as excited to see the popcorn bucket for "Dune: Part Three" as they are to see the film itself in December. Now that's something for film executives to chew on.

Reel alignment

Correlation between critics' and audiences' ratings of films, 1=max



Sources: Metacritic; The Economist

Music

Choosin' country

How Ella Langley two-stepped to the top of the charts

THE RECORD for the longest stint atop the *Billboard* Hot 100, a chart of America's most popular songs, once belonged to Mariah Carey's schmaltzy festive anthem, "All I Want For Christmas Is You". No longer. "Choosin' Texas", a twangy country song by Ella Langley, now claims that distinction, having spent 24 weeks in the number-one slot. (Though it was recently bumped to second place by Taylor Swift's new single.) Ms Langley's track about being dumped in a honky-tonk may seem like a replay of the genre's whisky-and-heart-break trope. In fact, her ascent shows how the country-music business is finding a new rhythm.

Country music has traditionally relied on radio to reach its fans. But it is now America's fourth-most-streamed genre, after R&B/hip-hop, rock and pop, according to Luminate, an analytics firm. Spotify reports that global streams passed 90bn last year and royalties have grown more than 130% since 2020. More labels are setting up shop in Nashville and Austin. Pop stars have climbed the charts after donning cowboy boots. This year Ms Swift, who started out as a country singer before turning to pop, returned to the genre with the single "I Knew It, I Knew You". (There are rumours that her next album will offer more boot-scootin' tunes.)

Ms Langley is currently touring her second album across America. Her monthly

listeners on Spotify, the biggest streamer, have soared by 20m in a year. Her breakout success combines old-world pastoral charm with an astute use of social media.

She grew up in Hope Hull, Alabama, where the population is just over 7,000. (Her first audience, she has joked, was a bunch of cows.) She hunts and claims to have learned to read by singing hymns at church. In 2019, aged 20, Ms Langley moved to Nashville to become a songwriter. She signed a record deal in 2023 after performing at the Grand Ole Opry, a halcyon venue in the city that made stars of Loretta Lynn and Dolly Parton.

Yet Ms Langley has made her name on social-media platforms as well as Nashville's stages. She posted a clip of herself singing in her car in 2021, which went viral; a publishing deal followed soon after. Her internet fame resulted in collaborations with more established stars. In 2024 a snippet of a single from her debut album, "Hungover", again went viral on TikTok.

Gen Z is charmed by the aesthetics of Americana. So the arrival of digitally native stars like Ms Langley, now 27, came at a "perfect moment", says Jaime Marconette of Luminate. The firm has found that country-music fans are 27% more likely than the average American to use TikTok, giving performers more opportunities to be discovered. They are also more likely to listen on repeat to their favourite songs and artists, which keeps the music in the charts. The mellow strains of "Choosin' Texas" have no doubt worked in its favour: it can be listened to again and again without its hooks becoming grating.

People who listen to music on streaming platforms tend not to seek out a specific genre, but a playlist that suits a mood or activity, such as cooking, explains Emily Cohen Belote of Amazon Music. This can

help songs reach unexpected audiences. The guitar riffs of "Choosin' Texas" may appeal to fans of 1980s soft rock. Ms Langley's husky voice recalls Sheryl Crow.

Still, the number of people choosing "Choosin' Texas" is surprising. A country track usually has to blend with another genre to "have this massive pop crossover moment", says Claire Heinichen of Spotify. That is not the case with Ms Langley's hit, which declares: "A cowboy always finds a way to leave / Drinkin' Jack all by myself." The appeal is in the storytelling. The lyrics might portray a "very specific Southern experience", admits Ms Heinichen. "But being sad in a bar is universal." ■

History lessons

The emperor's close

Napoleon and his Marshals.

By Andrew Roberts. *Avid Reader Press*; 704 pages; \$45. Allen Lane; £40

WHAT MANAGEMENT tips can you learn from conquerors? Put aside oppression, and there are lessons about delegation, motivation, recruitment and team building. Alexander the Great refused to drink water before battle to stand in solidarity with his men. Caesar marched on foot alongside his men, even swimming across rivers, to demonstrate his derring-do. When his army wobbled, he would fling himself in the way of his fleeing men, "even catching them by the throat and forcing them to face the enemy", according to Suetonius, a Roman historian. Diocletian divided the Roman Empire into four, and shared power while keeping a firm central grip.

In 2014 Andrew Roberts, a prolific British historian and member of the House of Lords, published an excellent biography of Napoleon and his boldness on the battlefield. In a new book he examines Napoleon's marshal system. The day after he proclaimed himself emperor of France in 1804, Napoleon appointed 18 "marshals of the empire", later increasing the tally to 26. They were to be "the swords around Napoleon's throne", the army's most venerated figures and the pinnacle of French society.

Some recruits came from the nobility; others were craftsmen's sons. They were indulged with fortunes, land and even marriages into the imperial family. Each was given a deep-blue velvet high-collared uniform trimmed with golden embroidery, complete with a red silk sash, and a baton inscribed with the gold imperial eagles. ►►



Breaking hearts and records

- Napoleon made six of them princes and crowned two kings.

The marshals' elite leadership team was built to carry out Napoleon's orders and bring glory to France by executing his new theory of warfare, with fewer set-piece sieges and more agile manoeuvres, thanks to an army that lived off the land. But Napoleon also devised an efficient modern management system, based on the recruitment of brilliant talent, doling out of lavish rewards, intolerance of weakness and a demand for total loyalty.

For all this Napoleon relied heavily on Louis-Alexandre Berthier, his chief of staff, first marshal and a skilled manager with a remarkable grasp of detail. A short, strong man who was said to be able to fall asleep with one eye open, Berthier was a former topographical engineer who had volunteered to sail across the Atlantic to help the Americans in their war for independence, drawing up a detailed map of the coast of Rhode Island.

Berthier divided the army staff into four branches, to cover everything from intelligence to supplies. Divisional commanders had to provide twice-daily updates on the whereabouts of every soldier; these dossiers, like proto-spreadsheets, were sent in 18 large volumes twice a month from the war ministry to Napoleon. In Berthier's written orders "all names of places, rivers, enemy generals and regiments were underlined," writes Lord Roberts. New information flowed constantly, from gunpowder stocks or the provision of shoes to the state of troops' morale. Berthier and Napoleon travelled in a coach fitted with cupboards and drawers for books, maps and a card index listing the location of every unit of the *Grande Armée*.

To motivate his marshals, Napoleon issued performance reviews in campaign

bulletins, showering praise for heroic achievements along with crushing criticism. Success was rewarded. An attentive manager, Napoleon also liked to offer his marshals personalised advice on how to galvanise the troops. "Do not neglect to fanaticise the soldier and to electrify his imagination to the utmost," he wrote to André Masséna as he was facing the Austrian army.

Yet in the end the management system failed him. As the empire expanded, Napoleon insisted on total control, cramped his marshals' autonomy and undermined their effectiveness. Worse, he came to weaken the very system he had built. His incentive scheme became capricious, as he overlooked those who deserved praise in some campaign bulletins, or used marshals as scapegoats.

Rather than generating creative tension, he fostered destructive rivalry. The danger, Lord Roberts notes, was "when marshals started to see warfare not as a team enterprise so much as a race among rivals for individual triumph and fame". Napoleon even boasted of stoking "continual jealousy": "I am careful to keep my ministers and generals at variance among themselves, in order that each may reveal to me the faults of the other."

The marshals began to come to blows after Napoleon's victory over the combined Russian and Austrian armies at Austerlitz in 1805, and things just got worse. For all his skill, writes Lord Roberts, "Napoleon had a great capacity for sheer spitefulness." By the time the emperor rode into his last battle in 1815, only two marshals accompanied him. Napoleon's "approach to leadership", the author notes, "ultimately left him almost completely bereft of the support he so desperately needed as he faced his Waterloo". ■

The race for AGI

Chronicle of a tech foretold

The AGI Chronicles. By Kevin Roose.

Farrar, Straus and Giroux; 448 pages; \$33.

Simon & Schuster; £25

TO SOMEONE WHO has not witnessed the AI scene in California's Bay Area, it is hard to convey how utterly weird it is. The Curve, a recent conference, hosted sessions including "What's the plan for keeping robots under control?" and "The Neural Frontier: what happens when AI can read your mind?" People lounged on couches and in gazebos with cold brews and kombuchas discussing how AI company staff made obscenely rich by forthcoming public offerings should channel their philanthropic giving—even as some of them conspired to hobble their own employers to delay civilisational upheaval.

The goal of Kevin Roose, a former reporter for the *New York Times*, was not to write a grand treatise on what AI means for the world but merely to record this weirdness before it was lost to the vagaries of memory, disappearing message threads and obsolete media-storage formats. In "The AGI Chronicles" his focus is the nine years since Google researchers developed the transformer, the type of AI model that underlies ChatGPT and all its kin. Quickly the idea took hold that, given enough data and computing power, transformer-based systems would eventually attain the holy grail: a truly "general" AI, or AGI, matching human smarts and then outstripping them.

That doctrine has been the driving force of AI research ever since. And so its history in the West mostly boils down to the interwoven fates of a handful of brilliant, prickly people raising ever more money, panicking each time they get leapfrogged by rivals and splitting off in a blaze of acrimony to start their own firms.

In outline, much of the story will be familiar. But Mr Roose captures the madness in a fast-paced style. His account is filled with gossipy anecdotes that highlight just how much the ambitions, ideological divides and personality clashes of a group small enough to fit in a couple of classrooms have shaped what may turn out to be the most consequential technology in modern history. As Mr Roose puts it, AGI is a "quest that half my sources thought was going to save the world, and the other half thought was going to end it".

Consider Dario Amodei, who early in his tenure at OpenAI proposed the doctrine that more data and more compute ►►



No slow horses

► equals more intelligence. He eventually left to form Anthropic, in part because he thought OpenAI was reneging on its original commitment to build AI safely, and in part because he considered Greg Brockman, OpenAI's president, "a bully, a credit hog, and a cut-throat capitalist", in Mr Roose's words. Mr Brockman, in turn, thought Mr Amodi was a "paranoid control freak who used safety as a pretext to win arguments".

For years, AGI was seen as the prize in an all-or-nothing contest to whose winner all power in the world would accrue. But as the goal approached, definitions multiplied to the point where the term has lost all meaning. At some point in 2025, Mr Roose noticed a shift in rhetoric. There would never be a finish line, only an endless arms race. By then, some researchers

were starting to be terrified by their creations' power—but "they kept accelerating, because they had forgotten how to do anything else."

Meanwhile, Mr Roose provocatively argues that AGI has, in fact, quietly arrived. A few dollars now buys you some time with an intelligence that is tolerably good at a growing number of things and extraordinary at a few; not human-level (yet), but already pretty general.

Perhaps that is why hardly anybody mentioned "AGI" at The Curve. The talk was of "extremely powerful AI" and "advanced superintelligence". The names and goalposts change, the relentless pursuit of computing capability continues, and with it the efforts of a small group of people, alternately elated and horrified at the creation taking shape before them. ■

Collecting

Are there too many art fairs?

PARIS

Probably. But FOMO keeps collectors and dealers going to them

ART COLLECTORS are like swallows. They flock together, preen and feed (on canapés and champagne). They also migrate seasonally. In October they roost in Paris during Art Basel, which runs from October 21st-25th. (The early birds landed in London for Frieze, another art fair, the previous week.) In December they head to Miami; in March to Maastricht; in May to New York; and in June to the original Basel in Switzerland. And that does not include the more adventurous ones, who zoom off to fairs in Doha, Hong Kong and Seoul.

It is as exhausting as it sounds. "Everyone is talking about art-fair fatigue," says Aurelie Cauchy of the Twentieth, an advisory firm. In 2025 there were 370 major art fairs—more than one for every day of the year. That is up from around 55 in 2000, says Clare McAndrew, an art economist. Can collectors and dealers maintain their current pace? Beneath the glass roof of the sun-drenched Grand Palais, where Art Basel Paris takes place, there is more gloom than the Instagram posts would have you believe (and not just because of the recent unrest in France).

Gallerists are facing what the French call a *choix cornélien* (difficult choice), says Ms Cauchy. The cost of keeping a physical storefront is growing, but fewer clients are casually popping in. Recently, some have had to lay off staff or close up entirely. Dealers feel pressure to keep travelling to fairs in order to find new clients and keep the artists they represent happy.

But this carries an ever-growing price tag, which many struggle to afford. Shipping costs are triple what they were before covid-19, says Thaddaeus Ropac, a prominent gallerist. (It's not just getting there; all unsold works have to be shipped back.) Gallerists' own travel costs have travelled higher, too. And the booths themselves have become more expensive to rent and build. Art Basel, for example, charges around \$29,000 for its smallest booth and more than \$177,000 for the largest. (The

square-metre price for large exhibitors is 32% more in real terms than in 2018.) Those fees just get you floor space: exhibitors need to rent carpet, lighting and add other design features. "Fairs are becoming a burden," especially for smaller and mid-sized galleries, says Valentina Castellani, an art-market expert.

Costs have changed the art that appears in fairs. Sculptures are so expensive to ship that they rarely make financial sense. Nor do items with lower price tags, such as many photographs.

Since fairs first arrived on the art scene in the 1960s-70s, collectors have found them worthwhile because of their scale and efficiency (so much art is packed into a small space). But art enthusiasts now have fair complaints. One is crowds. Fairs have a lot of guests and such long queues that you'd be forgiven for thinking VIP stands for "very immobile people". Basel has responded by launching a VVIP preview, Avant-Première, an evening before the VIP opening to offer buyers more quietude. Meanwhile, collectors are culling their calendars and choosing to attend fewer fairs. This month some Americans put the freeze on Frieze and opted to attend only Art Basel Paris instead.

In the future there may be fewer international fairs. People do not want to see the same gallerists everywhere. To lure collectors, organisers will need to offer a more distinctive experience, with more local galleries and artists. This is a broader trend beyond art. "We've gone from a moment where everything was meta-globalist to regionalisation," says Noah Horowitz, the boss of Art Basel. Some gallerists are excited, thinking they may participate in fewer fairs but encounter new local collectors at the ones they do. In art and in commerce, sometimes less is more. ■



Picture palace

Economic & financial indicators

	Gross domestic product				Consumer prices			Unemployment		Current-account		Budget balance		Interest rates		Currency units	
	% change on year ago				% change on year ago			rate		balance		balance		10-yr gov't bonds		per \$	
	latest	quarter*	2026†		latest	2026†		%		% of GDP, 2026†		% of GDP, 2026†		latest, %	change on year ago, bp	Oct 22nd	% change on year ago
United States	2.2	Q2	2.2	2.3	3.7	Sep	3.3	4.2	Sep	-3.5	-6.5	5.1	115	-			
China	4.5	Q3	4.9	4.7	0.9	Sep	0.9	5.2	Sep**§	4.3	-5.4	1.4	\$§	-25	6.68	6.7	
Japan	0.9	Q2	1.4	0.8	1.9	Aug	1.8	2.5	Aug	4.0	-1.8	2.9		126	158	-3.9	
Britain	1.4	Q2	2.1	1.3	3.5	Sep	3.3	4.7	Jul**††	-3.4	-5.2	5.4		82	0.75	nil	
Canada	1.1	Q2	3.3	0.9	3.1	Sep	2.8	6.5	Sep	-0.3	-2.1	3.9		79	1.40	nil	
Euro area	1.2	Q2	2.6	0.9	3.8	Sep	3.0	6.4	Aug	2.4	-3.6	3.4		88	0.89	-3.4	
Austria	0.6	Q2	-0.5‡	0.4	3.6	Sep	3.1	6.7	Aug	1.2	-4.1	3.7		83	0.89	-3.4	
Belgium	0.7	Q2	0.6	0.6	4.5	Sep	3.7	5.9	Aug	0.2	-5.2	4.4		123	0.89	-3.4	
France	0.5	Q2	0.1	0.4	3.4	Sep	2.5	8.2	Aug	-0.4	-5.4	5.0		169	0.89	-3.4	
Germany	1.0	Q2	1.3	1.0	3.3	Sep	2.8	4.0	Aug	4.4	-4.2	3.4		88	0.89	-3.4	
Greece	1.8	Q2	1.4	2.0	5.1	Sep	3.8	7.4	Aug	-5.5	0.6	4.4		116	0.89	-3.4	
Italy	1.0	Q2	0.6	0.9	4.2	Sep	2.9	6.2	Aug	0.7	-3.0	4.6		124	0.89	-3.4	
Netherlands	1.6	Q2	2.6	1.6	3.0	Sep	2.8	4.0	Sep	8.1	-3.0	3.5		82	0.89	-3.4	
Spain	2.6	Q2	2.8	2.6	5.0	Sep	3.6	10.0	Aug	2.4	-2.5	4.0		95	0.89	-3.4	
Czech Republic	1.8	Q2	1.1	1.6	2.5	Sep	2.2	3.0	Q2‡	nil	-2.8	5.3		100	21.6	-3.0	
Denmark	5.8	Q2	3.6	2.7	2.2	Sep	1.9	3.1	Aug	11.3	1.2	3.2		78	6.65	-3.3	
Norway	2.0	Q2	2.7	1.5	3.4	Sep	3.0	4.6	Aug**††	13.0	10.0	4.5		55	9.36	7.5	
Poland	4.1	Q2	4.5	3.4	4.1	Sep	3.0	5.8	Sep§	-2.0	-7.0	6.5		111	3.88	-5.7	
Russia	1.3	Q2	8.3	0.7	6.3	Sep	6.2	2.2	Aug§	2.3	-3.2	16.6		174	82.0	-0.8	
Sweden	3.2	Q2	6.4	2.1	1.1	Sep	1.6	8.1	Sep§	5.3	-2.3	3.2		63	9.89	-4.7	
Switzerland	2.8	Q2	7.8	1.7	1.0	Sep	0.6	3.1	Sep	8.2	0.2	0.6		39	0.82	-3.6	
Turkey	2.3	Q2	4.6	2.7	29.7	Sep	30.6	7.7	Aug§	-2.4	-3.5	32.8		305	49.6	-15.3	
Australia	2.1	Q2	1.7	2.1	4.0	Aug	4.0	4.7	Sep	-3.3	-1.0	5.3		109	1.42	8.4	
Hong Kong	4.3	Q2	-2.5	4.1	1.7	Aug	1.9	3.8	Aug**††	8.1	-2.6	4.1		125	7.85	-1.0	
India	7.8	Q2	6.8	7.2	5.5	Sep	4.6	4.0	Sep	-1.5	-4.3	7.4		94	94.4	-6.8	
Indonesia	5.3	Q2	4.4	5.2	3.3	Sep	3.4	4.7	Feb§	-2.1	-2.9	7.4		148	18,031	-7.9	
Malaysia	5.3	Q3	4.7	5.6	1.8	Sep	1.9	2.9	Aug§	3.0	-3.6	3.9		38	4.08	3.7	
Pakistan	4.0	2026**	na	3.0	10.3	Sep	9.0	6.9	2025	-1.1	-4.7	12.8	†††	94	277	2.3	
Philippines	2.3	Q2	2.4	2.9	7.2	Sep	5.8	6.0	Q3§	-4.6	-6.3	8.1		215	63.4	-8.1	
Singapore	5.4	Q3	4.4	5.7	2.3	Aug	2.1	1.9	Q2	15.8	1.3	2.4		61	1.28	1.6	
South Korea	3.8	Q2	2.6	3.5	2.9	Sep	2.7	2.0	Sep§	13.6	-0.6	4.2		127	1,327	7.8	
Taiwan	12.9	Q2	5.7	12.0	2.7	Sep	2.1	3.3	Aug	24.9	1.6	2.0		77	32.4	-5.3	
Thailand	1.9	Q2	-0.7	2.1	2.8	Sep	1.9	0.9	Sep§	-0.3	-5.5	2.9		58	33.6	-2.2	
Argentina	2.0	Q2	-2.3	1.7	33.4	Sep	32.5	7.9	Q2§	0.1	0.2	na		na	1,526	-2.3	
Brazil	2.0	Q2	1.9	2.0	4.6	Sep	4.4	5.3	Aug§†††	-2.6	-7.3	13.0		-87	5.02	7.2	
Chile	-0.2	Q2	-0.1	-0.3	4.1	Sep	3.8	9.6	Aug§†††	-0.9	-1.8	6.0		43	979	-2.8	
Colombia	3.4	Q2	5.2	2.5	6.3	Sep	6.0	9.4	Aug§	-2.0	-7.3	13.0		142	3,191	21.5	
Mexico	2.1	Q2	5.8	1.3	3.5	Sep	3.8	2.7	Aug	-0.4	-4.0	9.3		50	18.7	-1.3	
Peru	2.6	Q2	-1.0	2.8	4.5	Sep	3.9	4.0	Sep§	3.3	-2.2	6.7		90	3.43	-1.8	
Egypt	4.7	Q2	4.0	5.1	14.0	Sep	13.7	5.8	Q2§	-4.2	-5.3	25.6		50	54.4	-12.6	
Israel	7.2	Q2	15.4	4.3	1.6	Sep	1.9	3.0	Sep	1.5	-3.3	3.5		-38	3.09	6.8	
Saudi Arabia	-4.7	Q2	-17.9	-4.8	1.9	Sep	1.9	3.0	Q2	-3.8	-7.2	na		na	3.75	nil	
South Africa	0.9	Q2	-1.0	1.1	4.4	Sep	4.1	33.6	Q2§	-0.3	-4.4	8.7		-20	16.4	6.2	

Source: Haver Analytics *% change on previous quarter, annual rate [†]The Economist Intelligence Unit estimate/forecast [§]Not seasonally adjusted ^{††}New series ^{**}Year ending June ^{†††}Latest 3 months ^{††††}3-month moving average
^{§§}5-year yield ^{†††††}Dollar-denominated bonds. Note: Euro-area consumer prices are harmonised

Markets

In local currency	Index	% change on:	
		one week	Dec 31st 2025
United States S&P 500	7,757.2	0.5	13.3
United States NAS Comp	26,702.9	nil	14.9
China Shanghai Comp	3,713.0	-1.4	-6.4
China Shenzhen Comp	2,225.3	-2.7	-12.1
Japan Nikkei 225	64,621.2	-4.6	28.4
Japan Topix	4,043.7	-1.3	18.6
Britain FTSE 100	10,752.9	0.3	8.3
Canada S&P TSX	36,325.0	2.1	14.5
Euro area EURO STOXX 50	6,207.5	0.3	7.2
France CAC 40	7,921.7	0.6	-2.8
Germany DAX*	25,645.0	1.4	4.7
Italy FTSE/MIB	49,643.7	-0.2	10.5
Netherlands AEX	1,142.3	0.5	20.1
Spain IBEX 35	19,323.5	0.5	11.6
Poland WIG	160,445.8	1.1	36.9
Russia RTS, \$ terms	940.7	3.9	-15.1
Switzerland SMI	14,552.4	3.0	9.7
Turkey BIST	11,577.1	-4.5	2.8
Australia All Ord.	8,956.6	1.0	-0.7
Hong Kong Hang Seng	23,651.9	-2.7	-7.7
India BSE	73,709.7	1.3	-13.5
Indonesia IDX	5,328.4	-10.3	-38.4
Malaysia KLSSE	1,602.3	-1.6	-4.6

	Index Oct 21st	one week	% change on: Dec 31st 2025
Pakistan KSE	165,931.0	0.3	-4.7
Singapore STI	5,438.0	0.3	17.0
South Korea KOSPI	5,735.7	-4.5	36.1
Taiwan TWI	46,887.8	-3.6	61.9
Thailand SET	1,556.1	-1.3	23.5
Argentina MERV	2,848,945.3	0.5	-6.6
Brazil BVSP*	206,495.2	nil	28.2
Mexico IPC	70,249.5	5.2	9.2
Egypt EGX 30	52,854.9	2.6	26.4
Israel TA-125	4,106.3	2.0	12.1
Saudi Arabia Tadawul	9,926.6	-2.1	-5.4
South Africa JSE AS	109,658.0	1.1	-5.3
World, dev'd MSCI	4,952.9	0.7	11.8
Emerging markets MSCI	1,615.4	-2.6	15.0
US corporate bonds, spread over Treasuries			
Basis points		latest	Dec 31st 2025
Investment grade		98	93
High-yield		376	354
Sources: FactSet; Moscow Exchange; Standard & Poor's Global Fixed Income Research *Total return index			

Commodities

The Economist commodity-price index				
2020=100	Oct 13th	Oct 20th*	month	% change on year
Dollar Index				
All items	151.5	149.3	-3.0	8.7
Food	152.3	149.2	-1.9	3.7
Industrials				
All	150.9	149.5	-3.8	13.2
Non-food agriculturals	156.7	156.7	3.9	23.5
Metals	149.4	147.6	-5.7	10.7
Sterling Index				
All items	146.9	143.3	-3.3	8.6
Euro Index				
All items	154.7	151.7	-1.3	12.2
Gold				
\$ per oz	4,169.5	4,124.5	-4.7	-1.1
Brent				
\$ per barrel	105.7	108.8	9.6	77.4

Sources: CME Group; FactSet; LME; NOREXECO; NZ Wool Services; S&P; Thompson Lloyd & Ewart; USDA *Provisional. Note: new series for gold, oil and cotton

For historical indicators data, visit
economist.com/economic-and-financial-indicators

OBITUARY

Jeffrey Archer

The bestselling novelist, politician and conman died on October 5th, aged 86



“COULD IT WORK?” Archer asked himself. “Why on earth Cnot?” his alter ego replied.

He stood in the penthouse living room where, for years, diners of shepherd’s pie and Krug had been served up to London’s finest. From the floor-to-ceiling windows he stared down at the Shard, the Eye, the Cheese Grater and the Palace of Westminster, all embraced by the gleaming River Thames. Behind him, in the vast lounge, a Picasso and a Monet adorned the walls.

Settling into the overstuffed cream sofa, he felt almost insanely satisfied with his life. Yes, it would be well worth writing up. Rags-to-riches stories were his stock-in-trade, and the riches had come from his own efforts. More than 330m of his 31 page-turner novels had been sold in 114 countries. (The Monet was a bonus from his third, “Kane and Abel”.) There had been seven sets of short stories, three plays and even a Gospel. Not long ago, in India, a beggar boy at a traffic light had tried to sell him “the latest Jeffrey Archer”. “*I am the latest Jeffrey Archer!*” he had joyfully cried.

Besides all that he had climbed to the heights of British politics, sprinting there as he’d done to set an Oxford record in 1966: 100 yards in under ten seconds, earning him an Athletics Blue. Up and up, from Tory councillor for Havering to MP for Louth in Lincolnshire, to deputy chairman of the Conservative Party, to the House of Lords as Lord Archer of Weston-super-Mare, his childhood home. He served humble fare at his parties to remind himself and his influential guests how far and fast he had come.

Yet it could have been even faster and farther, if not for certain trip-ups on the way.

The summer sun beat down with unusual heat on the lawns of the Old Vicarage at Grantchester, former residence of the poet Rupert Brooke. There was honey, his own, for tea. Archer was in the thatched summerhouse, within earshot of a tinkling antique fountain, trying to write. Staedtler pencils and lined A4 paper were ranged in front of him.

However, words were not flowing. He very rarely suffered from writer’s block, but this side of his career was painful. It had ended

in the hell of Belmarsh, a category A prison where, after exchanging his Hilditch & Key shirt, his Aquascutum jacket and his House of Commons cufflinks for prison garb, he was conducted to a filthy cell with a hard mattress and an open lavatory with no flush.

Yet distinction had been his keynote. He implied he had been to Wellington, the public school, rather than Wellington School in Somerset. He had left with 3 O-levels, but slid into a Dip Ed at Oxford and emerged, after three sporting years, as an alumnus of Brasenose. Then he had set up a fake body-building course.

Like father, like son. After indulging in mortgage frauds Archer *père* had fled the country, ending up as a chewing-gum salesman in New York. Archer *fils* followed by fiddling his expenses in one short-lived job and then, in 1974, almost bankrupting himself by buying 105,000 shares in a fraudulent scheme. He lost almost £500,000; writing rescued him. He had just enough cash to stay on as an MP, but did not stand for re-election. Only two things saved his political skin. One was his charity work, though at times it raised less than he claimed. The second was the support of Margaret Thatcher and John Major who propelled him, despite his leftward lean, up the party ladder away from the snakes beneath.

But then came a particularly unfortunate encounter.

On the terrace of his villa in Mallorca, once the property of Yves St Laurent, Archer pondered. Before him stretched a favourite view, the Bay of Palma and the rugged Mediterranean coast. His wife of many years, Mary, once accurately described as “fragrant”, had brought him a cup of coffee and a plate of assorted biscuits. To steel himself, he took a chocolate one.

He had always been a charmer. Mrs T. had visibly kindled in his presence, and there were not a few affairs. However, in 1986 he insisted that pure philanthropy led him to pay £2,000 to a prostitute, Monica Coghlan, to persuade her to go abroad. The story led in the *News of the World* and, with more sex, the *Daily Star*. He sued, and won damages of £500,000. But the *Star* kept on his case, and in 2001 Archer went down for four years for perjury and obstruction of justice, besides losing the damages. The Tory Party expelled him for five years and the MCC suspended him for seven.

He could never fathom what perjury had to do with cricket.

Evening had arrived, and his A4 was still blank. Perhaps this really was too tall a tale, even for a master storyteller. For, after all that, he was still rich. His charity work was still admired, and prison had softened him. He even remained a member of the House of Lords. And people would undoubtedly go on reading him.

Fine literature was not his element, but he liked Puck. His version of him, performed at college in his 20s, had been a wicked elf, kicking people, leaping hedges and endlessly provoking Shakespeare’s midsummer lovers. Yet Puck was also kindly Robin Goodfellow. It was as both that on October 4th at London’s Leicester Square Theatre he bade farewell to his public: eager fans, rude critics, jealous writers, offended politicians. The whole lot.

We will make amends ere long;
Else the Puck a liar call;
So, good night unto you all.

Then he was gone. ■



OFFICIAL ANNOUNCEMENT OF THE 2026 NIGERIAN PETROLEUM LICENSING ROUND

In exercise of its statutory mandate under the Petroleum Industry Act (PIA) 2021, and with the approval of the President of the Federal Republic of Nigeria and Honourable Minister of Petroleum Resources, His Excellency Bola Ahmed Tinubu, GCFR, the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) is pleased to announce the official commencement of the 2026 Petroleum Licensing Round.

The 2026 Licensing Round offers forty (40) blocks across land, shallow water and deep water terrains. The offer comprises a diverse portfolio of exploration prospects and discoveries, catering to investors with varying technical expertise, investment capacities and operational capabilities.

This Licensing Round seeks to:

- Unlock undeveloped and underexploited upstream oil and gas assets, including fallow fields, in line with national policy objectives.
- Attract new investments into the upstream sector to grow reserves, accelerate production and create sustainable value for stakeholders.
- Generate employment opportunities across the oil and gas value chain.
- Enhance revenue generation for the Federal Government.

Building on the gains of recent sector reforms, the 2026 Licensing Round presents prospective investors with an opportunity to participate in the development of Nigeria's oil and gas resources and contribute to the country's long-term energy and economic objectives.

Recognising the importance of reliable technical information in investment decisions, the Commission, through its National Data Repository (NDR) and other approved sources, is committed to providing prospective bidders with access to comprehensive geological and geophysical datasets to support robust evaluation and informed decision-making.

Through this strategic initiative, the Commission seeks to encourage innovative exploration approaches, facilitate strategic partnerships and unlock additional value from Nigeria's petroleum resources.

Environmental protection and responsible resource management remain central to the Commission's approach. Accordingly, the 2026 Licensing Round places emphasis on Environmental, Social and Governance (ESG) considerations, with a commitment to promoting exploration and development activities that minimise carbon emissions and mitigate adverse environmental impacts in support of broader international energy security objectives.

Through a transparent investment framework, effective stakeholder engagement and sound resource management practices, the initiative is designed to deliver shared benefits and support sustainable prosperity.

The Petroleum Industry Act provides an enhanced legal and regulatory framework to promote investment and ensure that the benefits of petroleum resource development extend to the Federal Republic of Nigeria, domestic and international investors, and host communities, while maintaining a strong commitment to environmental sustainability.

Detailed information on the 2026 Nigerian Petroleum Licensing Round, including relevant guidelines and participation requirements, will be available on the dedicated portal, br2026.nuprc.gov.ng which will be launched on November 20, 2026.

The NUPRC reiterates its commitment to conducting an open, fair, transparent, and competitive licensing process. Prospective investors and industry partners who share in our commitment to operational excellence, safety, responsible resource development and environmental stewardship are welcome to participate.

The Commission looks forward to the participation of qualified investors and stakeholders in this strategic initiative and remains committed to fostering a competitive, sustainable and investment-friendly upstream petroleum industry for the benefit of Nigeria and its people.

SIGNED
ORITSEMEYIWA EYESAN (MRS.)
 COMMISSION CHIEF EXECUTIVE, NUPRC
 20TH OCTOBER 2026

Scan to visit the portal
br2026.nuprc.gov.ng



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